

FOREWORD

ABSTRACTS AND INDEXES FOR PROCEEDINGS, VOL. 87, 1961

This index provides a guide to material published in the ASCE Proceedings during 1961. The abstracts indicate what general information can be found in the paper in question. The author index includes the names of authors, co-authors, discussers, and chairmen of the committees preparing the several reports. Subject headings have been restricted as follows:

1. Each paper is listed under one primary heading suggested by the name of the Journal in which the paper appeared.
2. A second listing of a paper is made for further refinement of indexing. In the second listing, an attempt is made to index papers of interest to several Divisions under the headings suggested by the Division names.

Discussions can be traced by referral in the author index to the name of the senior author of a paper. Discussion over a period of time can be traced in this fashion until the closing discussion is located.

Typical abbreviations used herein are: Dsc for "discussion," Clo for "closing discussion," Corr for "corrections," and Chrm for "chairman" of a committee submitting a report.

Each entry includes information, in parentheses, that can be used to locate an item that has been indexed. For example,

Aug SM4:147:2912

would indicate a paper published in the August 1961 Journal of the Soil Mechanics and Foundations Division on page 147, as Proceedings Paper 2912.

In the author index the original entry for a paper is supplemented by information concerning the discussion and closure, if applicable. When discussion is published of a paper from a prior year, the original entry is repeated, except that the year of publication is indicated.

Items indexed are identified by months as follows:

MONTH	PAPER NUMBERS	JOURNALS
January	2698-2725	HY1 (Hydraulics), PO1 (Power), PP1 (Professional Practice), SA1 (Sanitary Engineering), ST1 (Structural), SU1 (Surveying and Mapping).
February	2726-2755	EM1 (Engineering Mechanics), PL1 (Pipelines), SM1 (Soil Mechanics and Foundations), ST2 (Structural), WW1 (Waterways and Harbors).
March	2756-2789	AT1 (Air Transport), CO1 (Construction), IR1 (Irrigation and Drainage), HW1 (Highways), HY2 (Hydraulics), SA2 (Sanitary Engineering), ST3 (Structural).

MONTH	PAPER NUMBERS	JOURNAL
April	2790-2805	EM2 (Engineering Mechanics), SM2 (Soil Mechanics and Foundations), ST4 (Structural).
May	2806-2827	HY3 (Hydraulics), SA3 (Sanitary Engineering), WW2 (Waterways and Harbors).
June	2828-2846	IR2 (Irrigation and Drainage), EM3 (Engineering Mechanics), HW2 (Highways), SM3 (Soil Mechanics and Foundations), ST5 (Structural).
July	2847-2874	PO2 (Power), SU2 (Surveying and Mapping), HY4 (Hydraulics), SA4 (Sanitary Engineering).
August	2875-2917	AT2 (Air Transport), EM4 (Engineering Mechanics), SM4 (Soil Mechanics and Foundations), ST6 (Structural), WW3 (Waterways and Harbors).
September	2918-2949	CP1 (City Planning), HW3 (Highways), HY5 (Hydraulics), IR3 (Irrigation and Drainage), PP2 (Professional Practice), SA5 (Sanitary Engineering).
October	2950-2975	EM5 (Engineering Mechanics), SM5 (Soil Mechanics and Foundations), ST7 (Structural), PP3 (Professional Practice).
November	2976-3004	HY6 (Hydraulics), PO3 (Power), SA6 (Sanitary Engineering), WW4 (Waterways and Harbors).
December	3005-3032	EM6 (Engineering Mechanics), IR4 (Irrigation and Drainage), SM6 (Soil Mechanics and Foundations), ST8 (Structural).

1961 PROCEEDINGS ABSTRACTS

January

Journals: Hydraulics, Power, Professional Practice, Sanitary Engineering, Structural, Surveying and Mapping.

2698. Status of State Registration Laws, by William M. Spann. (PP) The development and importance of registration laws for engineers in the United States is considered.

2699. Meaning of the Professional License to Engineers, by Donald Kowtko. (PP) This paper presents the results of a survey outlining the tangible and intangible forces that motivate engineers toward obtaining their annual professional license.

2700. Hydrogeologic Nature of Streamflow on Small Watersheds, by J. L. McGuinness, L. L. Harrold, and C. R. Amerman. (HY) The importance of watershed area in depth-area-duration-frequency relationships on streamflow from small watersheds is considered. The interrelationships between the geologic and hydrologic aspects are presented.

2701. Chlorination of Mixed Sewage and Storm Water, by Thomas R. Camp. (SA) This paper concerns the effective use of screening and chlorination of raw sewage and storm water by pollution control agencies.

2702. Surveys for the Lake Pontchartrain Bridge, by James M. Tuttle. (SM) The overall survey control for the Lake Pontchartrain Bridge and the challenging problems prior to and during construction are considered.

2703. Static and Dynamic Analysis of Guy Cables, by Donald L. Dean. (ST) Guy cables are analyzed for static

and dynamic conditions, and examples are solved to illustrate the formulas derived.

2704. Lateral Inelastic Buckling of Tied Arches, by Chin Fung Kee. (ST) The behavior of the tied or stabbogen arch in the light of existing inelastic buckling theories is examined, and a theoretical method for computing the inelastic buckling load is produced.

2705. Highway and Bridge Surveys: Construction Surveys, Progress Report, Committee on Engineering Surveying of the Surveying and Mapping Division. (SU) This report deals with the design of triangulation systems, the location of control stations, and base lines.

2706. Frequency of Natural Events, by H. C. Riggs. (HY) This paper examines the development of a cumulative frequency curve and its relationship to magnitude.

2707. Underground Outlet Works for Courtright and Wishon Dams, by J. B. Cooke and J. E. Schumann. (HY) The diversion and outlet works for the Courtright and Wishon Dams are explained in this paper.

2708. Some Aspects of Surface Water Wave Scale Effects, by Gerrit Abraham. (HY) A study of the scale effects due to surface tension for model studies of water gravity waves generated by moving pressure disturbance is presented.

2709. Electronic Computer Use in Scoping Power Projects, by Parker R. Grimes and Glenn H. Von Gunten. (PO) A summary of successful computer applications in planning and design of lower Columbia and Snake River power developments is presented.

2710. Prototype Measurements of the Columbia River Estuary, by John B. Lockett and Harold A. Kidby. (HY) Modern methods of measuring flow characteristics of the extremely complex Columbia River entrance system define the environmental conditions affecting the problem of shoaling in the entrance area and reveal phenomena that appear to have important significance relating to this problem.

2711. Hydraulic Computations from Limited Information, by Cecil K. Oakes. (HY) The author describes methods, together with sample results, recommended for use in certain types of hydrologic and hydraulic computations in which lack of time and/or funds will not permit obtaining additional basic data and information.

2712. Analysis of Structures by Combining Redundants, by Peter P. Gillis and Kurt H. Gerstle. (ST) The method of analysis of elastic structures that avoids the solution of large systems of simultaneous equations is examined.

2713. Development of a Variable Reluctance Velocity Meter, by Iury L. Maytin. (HY) Presented herein is a new method of measuring fluid flow based on the principle of variable reluctance.

2714. Stress Analysis and Special Problems of Prestressed Dams, by O. C. Zienkiewicz and R. W. Gerstner. (PO) The development and use of cable methods of prestressing as applied to dams is presented.

2715. Recent Trends in Ultimate Strength Design, by Phil M. Ferguson. (ST) This paper considers recent trends of the ultimate strength theory for reinforced concrete members.

2716. Hydraulics of Southwest Pass, Mississippi River, by Chester A. Peyronnin, Jr. (HY) This paper summarizes and generalizes the results of an extensive

data collection program at Southwest Pass of the Mississippi River.

2717. Marine Disposal of Wastes, Progress Report, Subcommittee on Specialized Subjects, Committee on Sewerage and Sewage Treatment. (SA) The availability and appreciation of basic knowledge concerning marine disposal of wastes has increased rapidly during the past few years. The expanding interest in the subject is illustrated not only by the literature, but by the number of symposia and conferences that have been held.

2718. Storm Water and Combined Sewage Overflows, by Samuel A. Greeley and Paul E. Langdon. (SA) Most of the larger and older cities in the United States are served by combined sewer systems. The intersection and treatment of the dry weather sewage and the first flushings of storm water has accomplished much toward pollution abatement. Treatment of overflows by retention and chlorination can improve the conditions in the receiving waterway, in some respects, at feasible costs.

2719. Discussion of Proceedings Paper 2383, 2365, 2379. (SU) Edward Adams Richardson on 2383. Alfred W. Fischer on 2365. T. F. Hickerson on 2379.

2720. Discussion of Proceedings Paper 2481, 2558. (SA) Conrad P. Straub and Vincent J. Sodd on 2481. Edward R. Hermann on 2558.

2721. Moment-Distribution Constants from Cardboard Analogs, by Otakar Ondra. (ST) An experimental method of determining moment-distribution and slope-deflection constants for beams with variable moments of inertia is proposed. Simple graphics, especially evolved for the purpose at hand, are used to lay out cardboard templates. Templates areas are evaluated and their centroids are located experimentally. This is equivalent, respectively, to numerical integration and division of one integrated function by another. The method is simple, rapid, and sufficiently accurate for office use.

2722. Discussion of Proceeding Paper 1868, 1869, 1870, 1871, 1872. (PP) The Student Activities Committee, San Diego Section, ASCE on 1868. F. C. Lindvall on 1869. Jack E. McKee on 1870. L. E. Grinter on 1871. C. Ken Weidner on 1872.

2723. Discussion of Proceedings Paper 2206, 2289, 2291, 2515, 2569. (PO) William R. Waugh and James A. Rhodes on 2206. Dante Finzi, Mario Mainardis, and Carlo Semenza on 2289. Robert Bouchayer on 2291. Clark L. White, J. B. Billingsley, Robert E. Hollick, F. W. Rechtermann, C. B. Benham, Harold H. Dugan, Jr. on 2515. Adolf A. Meyer on 2569.

2724. Discussion of Proceedings Paper 2081, 2085, 2128, 2129, 2147, 2148, 2149, 2150, 2200, 2201, 2202, 2224, 2242, 2370, 2469, 2478, 2484, 2485, 2525, 2526, 2531, 2546, 2551. (HY) Henry M. Morris on 2081. Paul C. Mayer on 2085. Bertram S. Barnes on 2128. Marvin J. Webster on 2129. Phillip Z. Kirpich and Carlos S. Ospina on 2147. M. J. Webster and L. R. Metcalf on 2148. Joe M. Lara and Kenneth B. Schroeder on 2149. G. T. Orlob on 2150. G. L. Bleichley and A. J. Peterka on 2200. Charlie M. Moore on 2201. P. S. Eagleson and R. G. Dean on 2202. James W. Ball on 2224. William R. Ferrell on 2242. R. C. Kolf and P. B. Zielinski on 2310. Chesley M. Posey, Monir M. Kansoh, Serge Leliavsky on 2469. Ernest Flack, Harold W. Humphreys, E. T. Smerdon, R. P. Beasley and L. D. Meyer on 2478. Gerald Lacey, Peter Ackers, G. Kalkanis, John F. Kennedy, T. Blench, Claude Inglison on 2484. H. A. Einstein, T. Blench, Emmett M. Laursen and Gerald A. Zernial, Dasal E. Hallmark, Thomas Massock, Jr. and W. B. Langbein, R. Hugh Taylor, Jr. and Norman H. Brooks, Lucien M. Brush, Jr. on 2485. Russel Woodburn, T. Blench on 2525. Emmett M. Laursen, Egidio Irdi on 2526. Melville S. Priest, Milton A. Chapple, R. C. Kolf and W. L. Meyer on 2531. W. D. Baines on 2546. M. E. Harr, Raphael G. Kazmann, W. T. Moody, K. T. Sundara Raja Iyengar on 2551.

2725. Discussion of Proceedings Paper 2218, 2256, 2259, 2321, 2441, 2460, 2512, 2545. (ST) Ming L. Pei on 2218. A. L. L. Baker on 2256. Ardis White on 2259. S. L. Lee and F. P. Wiesinger on 2321. R. S. Alwar on 2441. Gordon K. Ray and William G. Westall on 2460. S. O. Asplund on 2512. A. A. Eremin on 2545.

February

Journals: Engineering Mechanics, Pipelines, Soil Mechanics, Structural, Waterways and Harbors.

2726. Small-Boat Development on the Pacific Coast, by Reuben J. Johnson. (WW) Harbor characteristics, federal interest, benefit analysis, construction features, and shoreline considerations are examined with a view toward ultimate development of a chain of small-boat harbors along the coast.

2727. Spherical Waves in a Plastic Locking Medium, by Mario G. Salvadori, Richard Skalak, and Paul Weidlinger. (EM) Asymptotic short-time and long-time solutions are derived in closed form for the spherical wave propagation in an infinite, plastic locking medium.

2728. Vibration of Shear Buildings by Flexibility Method, by Ming L. Pel. (EM) A modified matrix iteration method using the inverse of the stiffness matrix that will obtain the primary vibration frequency of buildings is presented.

2729. Latest Dredging Practice, by Ole P. Erickson. (WW) This paper contains a description of the modern hydraulic dredge and its importance in industry.

2730. Shoaling of the Lower Hudson River, by Charles M. Duke. (WW) This paper is a progress report on the investi-

gations being performed by the Corps of Engineers using large hydraulic models at Vicksburg, Mississippi to solve the problem of excessive shoaling in the lower Hudson River below the George Washington Bridge, in New York.

2731. Dynamic Elastic-Plastic Analysis of Structures, by Melvin L. Baron, Hans H. Bleich, and Paul Weidlinger. (EM) This paper presents the finite difference method for the elastic-plastic analysis of structures and a comparison of its results with simpler theories.

2732. Underpinning of a Wind Tunnel, by James F. McNulty and James S. O'Brien. (SM) A new method of reinforcing the foundations of wind tunnels is examined.

2733. Marine Oil Terminal for Rio de Janeiro, Brazil, by H. W. Reeves. (WW) This paper describes the engineering design of the wharf, pipelines, and mechanical equipment of the newly constructed marine oil terminal.

2734. Timber Piles Installed in Permafrost, by Willard C. Jensen. (SM) Data are presented from the construction of a large composite building in permafrost which support the contention that it is no longer necessary to place piles 30 ft deep to assure support in areas where the mean annual temperatures are 22F or lower.

2735. Viscoelastic Plate on a Viscoelastic Foundation, by Karl F. Pister. (EM) Axisymmetric bending of a viscoelastic plate of finite thickness supported by a viscoelastic foundation of infinite extent is examined.

2736. Moire Fringes as a Means of Analyzing Strains, by C. A. Sciammella and A. J. Durelli. (EM) The objec-

tive of this paper is to show the application of moire fringes in the determination of strains in two-dimensional models.

2737. Pipeline Location: As-Built Records, Progress Report of the Task Committee on Pipeline Location of the Pipeline Division. (PL) Regulatory agencies' requirements relative to as-built records are described for natural gas and common carrier pipelines.

2738. Pipeline Location: Engineering Service Agreement, Progress Report of the Task Committee on Pipeline Location of the Pipeline Division. (PL) A model agreement covering most types of engineering-survey services that a pipeline company might expect to obtain from outside organizations is presented.

2739. Pipeline Location: Duties of the Engineer on Construction, Progress Report of the Task Committee on Pipeline Location of the Pipeline Division. (PL) Functions of the engineer on construction are presented.

2740. Pipeline Location: Reconnaissance, Progress Report of the Task Committee on Pipeline Location of the Pipeline Division. (PL) Procedures used in the process of reconnaissance of pipeline locations are reviewed.

2741. Minimum Weight Design of Beams for Deflection, by Ralph L. Barnett. (EM) Design procedures for minimum weight of statically determinate beams are examined.

2742. Tests of Composite Beams with Stud Shear Connectors, by Charles Culver and Robert Coston. (ST) This paper presents the test results of composite concrete-steel beams using L-shaped stud-shear connectors.

2743. Stress Analysis of Translational Shells, by Kristoffer Apeland. (EM) A method of solution of the problem of bending of thin shallow translational shells is presented.

2744. Behavior of Beach Fills in New England, by Harry S. Perdikis. (WW) A study of the behavior of fills placed on ten New England beaches.

2745. Synthetic Material Filters in Coastal Protection, by Hans A. Agerschou. (WW) This paper reviews the possibilities of substituting "synthetic material filters," especially glass fiber and plastic filters, for graded material filters in coastal protective and river structures.

2746. New Method of Consolidation-Coefficient Evaluation, by Ronald F. Scott. (SM) A new method of evaluating the consolidation-coefficient utilizing the ration of compressions is examined.

2747. Design of Fox Point Hurricane Barrier, by Roy S. Martin. (WW) This paper described the Fox Point Hurricane barrier and examines the major design problems caused by tide levels, wave forces, estuary flow, and poor foundation conditions.

2748. Wind-Induced Vibrations in Antenna Members, by William Weaver, Jr. (EM) The results of the wind tunnel are presented for the semi-empirical solution to the problem of wind-induced vibrations in the aluminum tubular members of large radar antenna space frames.

2749. The Great Volga Waterway, by Otakar W. Kabelac. (WW) A survey of the engineering development of the European Volga River from unregulated natural conditions into a modern waterway system is presented.

2750. Discussion of Proceedings Paper 2168, 2173, 2177, 2301, 2507, 2590. (WW) R. Silvester on 2168. H. A. Einstein and Jones A. Harder on 2173. J. W. Johnson on 2177. P. Brun and F. Gerritsen on 2301. Charles E. Lee, Robert L. Miller on 2507. Shoshichiro Nagai, A. S. Kahan on 2590.

2151. Discussion of Proceedings Paper 2198, 2505, 2575, 2578, 2615, 2627. (EM) Aris Phillips on 2198. M. T. Davisson on 2505. Paul I. Rongved, G. S. Kovacs, and R. T. Frankian on 2575. Paul Baumann, Maurice L. Dickinson on 2578. Donald S. Mansell on 2615. H. G. Hopkins on 2627.

2152. Discussion of Proceedings Paper 2062, 2214, 2217, 2564, 2574, 2623. (SM) Irving S. Dunn on 2062. Herbert L. Lobdell on 2214. W. J. Turner and C. I. Mansur on 2217. I. Alpan, Joseph G. Perri, A. A. Eremin on 2564. E. Jones, A. A. Eremin, G. M. Cornfield, Robert D. Chellis and Arthur F. Zaskey on 2574. W. J. Turnbull, Edward S. Barber on 2623.

2753. Discussion of Proceedings Paper 2023, 2204, 2205, 2240. (PL) Richard E. Burnett, William W. Moore, and Vernon A. Smoots on 2023. Raymond H. Crowe, Steve R. Sawyer, John Randall on 2204. Donald Van Sickle on 2205. J. Hasker on 2240.

2754. Discussion of Proceedings Paper 2477, 2480, 2544, 2552, 2555, 2640, 2643, 2692. (ST) Chun-Yeh Liu, James Chinn on 2477. Joseph W. Appletauer and Thomas A. Barta on 2480. James Chinn on 2544. A. S. Arya, A. R. Robinson on 2552. John W. Fisher and Ivan M. Viest on 2555. V. Paschkis on 2640. Morris Ojalvo, F. T. Mavis on 2643. M. W. Kaufman on 1692.

2755. Rational Design for Pipelines Across Inundated Areas, Progress Report

of the Task Committee on Floatation Studies and Pipeline Installations of the Pipeline Division. (PL) Data on pipelines including floatation, weight, and anchoring are presented.

March

Journals: Air Transport, Construction, Irrigation and Drainage, Highways, Hydraulics, Sanitary Engineering, Structural.

2756. Needs in Sedimentation, by H. A. Einstein. (HY) An analysis of the design problems of alluvial river channels is studied, with concentration on sedimentation needs.

2757. Leaching Requirements in Irrigation, by Raymond A. Hill. (IR) A study of leaching in irrigation practice is presented, with emphasis on principal purposes.

2758. Airplane Performance and the Small Airport, by Walter E. Gillfillan. (AT) The importance of airplane performance data for the designer of small airport runways and runway approaches is illustrated.

2759. Aggregates and Fly-Ash Concrete for Barkley Lock, by Louis Campbell, Jr. (CO) Presents an actual account of the field handling of aggregates, mix data, and test results of fly-ash concrete.

2760. Cost Allocation of Water Projects in California, by Amalio Gomez. (HY) This paper describes the separable costs-remaining benefits method of allocating the costs of multiple-purpose water projects.

2761. Intercepting Drainage Wells in Artesian Aquifer, by Dean F. Paterson. (IR) A formula for channel seepage to a leaky artesian aquifer and the resulting piezometric surface is presented.

2762. Water Balance Recorder, by Hans Aslyng and Knud J. Kristensen. (IR) This paper presents a detailed description of the design and construction of a semi-floating lysimeter.

2763. Vector Aspects of Dynamic Similarity, by R. C. Kolf and W. L. Reitmeyer. (HY) A study of the laws of dynamic similarity emphasizing the refinements imposed by the vector nature of the fluid flow variables is presented.

2764. Safety, Reliability and Structural Design, by A. M. Freudenthal. (ST) The safety analysis of structural designs emphasizing the relationship and importance of the statistical distribution function (safety factor) and the "reliability function" is studied.

2765. Theory of Wave Agitation in a Harbor, by Bernard Le Mehaute. (HY) A first order theory for the value of the wave agitation in a simple basin caused by an incident periodical gravity wave is examined. Results obtained by theory are compared with those obtained experimentally.

2766. Prefabricated Reducers as Entrances for Pipe Culverts, by Harvey G. Aronson. (HW) An analysis is made of the improved flow rate made possible when prefabricated reducers are used as entrances for pipe culverts.

2767. Radiological Curricula for Sanitary Engineers, by John E. Kiker, Jr.,

and F. Wellington Gilcreas. (SA) The need for specialized programs for sanitary engineers concerning the control of environmental pollution from radioactivity is stressed.

2768. Marine Foundation Construction in Oil Fields, by S. J. Mathis. (CO) The method of constructing foundations of marine oil reservoirs is presented.

2769. Relation in Intake Rate to Length of Run, by A. Alvin Bishop. (IR) The relationship between the intake rate of the soil and the length of run in surface irrigation with regard to the amount of water lost below the root zone through the deep percolation is presented.

2770. Estuarial Sediment Transport Patterns, H. A. Einstein and R. B. Krone. (HY) The process of mud transportation emphasizing the flocculation characteristics of suspended clays is studied.

2771. Pollution of the Androscoggin River, by E. Sherman Chase. (SA) The observations and analyses of the pollution problems of the Androscoggin River and the required remedial measures, since 1940, are presented.

2772. Vibration Problems in Hydraulic Structures, by Frank B. Campbell. (HY) A study of the vibration of control gates and regulating valves commonly used in hydraulic structures is presented.

2773. Blending Natural Earth Deposits—For Least Costs, by J. B. Ritter and L. R. Shaffer. (CO) The results of the process of blending natural earth deposits economically are studied.

2774. Runway Roughness Studies in the Aeronautical Field, by John C. Hou-

bolt. (AT) Several phases of the runway roughness problem affecting airline operations are presented.

2775. Variable Head Technique for Seepage Meters, by Herman Bouwer. (IR) A technique for measuring canal or reservoir seepage losses with seepage meters is proposed.

2776. Stream-Gaging Network in the United States, by John E. McCall. (HY) The national stream-gaging program is analyzed with regard to size, cost, and comparison between the states and other countries.

2777. Stilling Basin Damage at Chief Joseph Dam, by R. H. Gedney. (HY) Reports on the causes of damage that have occurred to the stilling basin during construction, from 1952 to 1960, are examined.

2778. Removal of Floatables from Digested Sludge, by R. J. Theroux, C. H. Lawrance, and N. B. Hume. (SA) Descriptions of certain laboratory and pilot studies for effective and economical means of insuring removal of floatable fractions before discharge are analyzed.

2779. Matrix Analysis of Structures Curved in Space, by Frank Baron. (ST) A general solution is given in matrix form for the analysis of a member, curved or segmental in space and continuous between two supports.

2780. Forecasting River Runoff by Coastal Flow Index, by David M. Rockwood and Carlton E. Jencks. (HY) An index method for forecasting April-through-September runoff for the Columbia River at The Dalles, Oreg., is presented.

2781. Discussion of Proceedings Paper 2265, 2336, 2340, 2456, 2484, 2577. (HY)

Joe L. Mogg on 2265. Herbert D. Vogel on 2336. T. Blench on 2340. Donald Van Sickle on 2456. Marcel Bitoun, Monir M. Kansoh on 2484. Jaime Amorochio, Merwin D. Dougal, Robert L. McFall and Ben A. Jones, Jr. on 2577.

2782. Discussion of Proceedings Paper 2513, 2592, 2604. (HW) Frank W. Herring on 2513. E. J. Woodward, Jr., Robert P. Lottman, F. N. Hveem, John L. McRae on 2592. Karl Moskowitz and Ichiro Fukutome on 2604.

2783. Discussion of Proceedings Paper 2424, 2556, 2558, 2607. (SA) A. M. Rawn, F. R. Bowerman, and Norman H. Brooks on 2424. Harold B. Gotaas on 2558. I. C. Hart and A. L. Downing on 2556. Jerzy Ganczarczyk on 2607.

2784. Nuclear Power for the Arctic, by William F. Reilly and John T. Rhett, Jr. (CO) A brief history of the Army's nuclear power and Arctic research and development programs, coupled with the installation of the PM-2A nuclear power plant on Camp Century, Greenland, is presented.

2785. Discussion of Proceedings Paper 2142, 2661. (CO) Roger H. Williams on 2142. Richard J. Newson on 2661.

2786. Discussion of Proceedings Paper 2160, 2595. (IR) William L. Berry and Edward D. Stetson on 2160. Gregory Efstratiadis on 2595.

2787. Discussion of Proceedings Paper 2314, 2346, 2542, 2545, 2608, 2633, 2643, 2680. (ST) Jan J. Tuma on 2314. Sabri Sami on 2346. T. Janiszewski and Blair Birdsall on 2542. John A. Blume on 2545. A. A. Eremin on 2608. Walter E. Kunze on 2633. Roy W. Clough on 2643. Merit P. White on 2680.

2788. Discussion of Proceedings Paper 2460. (AT) Gordon K. Ray and William G. Westall on 2460.

2789. Earthwork Computations on Electronic Computers, by Robert J. Hansen, S. Ray Cason, and Paul Yeager. (HW) This paper describes the complete system of earthwork computations presently being used. Included is a description of the basic earthwork quantity computations, the machine-computed template notes (including median design), and the by-products that provide additional services to the engineer.

April

Journals: Engineering Mechanics, Soil Mechanics and Foundations, Structural.

2790. Response of Multi-Story Structures to Earthquake, by Glen V. Berg. (EM) The behavior of multi-story buildings is presented and their responses to strong earthquake ground motion are studied and recorded by a high-speed digital computer.

2791. Symposium on Grouting: Grouting of Granular Materials, by John C. King and Edward G. W. Bush. (SM) Information relating in-place grain size with pore dimensions and suitable grout particle diameter is analyzed. Descriptions of foundation materials and techniques are presented.

2792. Symposium on Grouting: Grouting at Fort Campbell Theatre Building, by B. E. Clark. (SM) Descriptions of the occurrence, exploration, and grouting treatment of a sink under construction are studied.

2793. Symposium on Grouting: Grouting to Prevent Vibration of Machinery

Foundations, by John P. Gnaedinger. (SM) A technique for reducing the amplitude of vibrations of an expander and two compressor foundations to tolerable magnitudes is presented.

2794. Symposium on Grouting: Research in Foundation. Grouting with Cement, by Thomas B. Kennedy. (SM) This paper presents a review of the materials, mixes, techniques, equipment, and problems of foundation grouting.

2795. Symposium on Grouting: Investigation of Sand-Cement Grouts, by James M. Polatty. (SM) This paper is a presentation of the results and effects of an investigation of various types and gradations of sand for portland-cement grouts.

2696. Construction of Rocky Reach Grouted Cutoff, by W. F. Swiger. (SM) This paper describes the design and construction, by grouting, of a cutoff constructed across a series of openwork gravels to control seepage.

2797. Grouting in Flowing Water and Stratified Deposits, by R. H. Karol and A. M. Swift. (SM) Experimentation defining the modification that ground water flow and stratification make on the anticipated shape and size of a grouted mass is examined.

2798. Two-Dimensional Flow with Corner Eddies, by Aris C. Spengos. (EM) Flow in a two-dimensional channel with an asymmetrical abrupt contraction is analyzed.

2799. Brittle Fractures Explained by Negative Residuals, by L. E. Grinter. (EM) A theoretical explanation is presented with the hypothesis that residual lateral compressive stresses may suppress ductility across a notch and permit the occurrence of cleavage fracture.

2800. Bending of Beams Resting on Isotropic Elastic Solid, by Aleksandar B. Vesic. (EM) The Biot's solution for bending beams resting on isotropic elastic solids is reviewed, and a thorough investigation of the conventional approach by means of the coefficient of subgrade reaction k is presented.

2801. Continuous Beam-Columns on Elastic Foundation, by S. L. Lee, T. M. Wang, and J. S. Kao. (EM) An analysis is presented of continuous beam-columns on elastic foundation by means of the slope-deflection equations and related problems.

2802. Strength and Design of Metal Beam-Columns, by Walter J. Austin. (ST) A review is presented of the state of knowledge, as of 1961, relating to behavior, strength, and design of metal members subjected to combined axial compression and bending.

2803. Discussion of Proceedings Paper 2497, 2616, 2627, 2690. (EM) Alfred H. S. Ang on 2497. Gerrit H. Toebes on 2616. L. W. Gold, R. H. Wood on 2627. N. C. Lind and D. T. Wright, Daniel Frederick on 2690.

2804. Discussion of Proceedings Paper 2294, 2368, 2501, 2564, 2623, 2625. (SM) James K. Mitchell and Dean R. Freitag on 2294. W. Heukelom and C. R. Foster on 2368. John A. Horn on 2501. Bobby Ott Hardin, V. A. Smoots, J. F. Stickel, and J. A. Fischer, S. D. Wilson and R. P. Miller on 2564. H. J. Gibbs on 2623. Laurits Bjerrum and Kwan Yee Lo, W. M. Kirkpatrick, A. A. Eremin, Andrew W. Jenike on 2625.

2805. Discussion of Proceedings Paper 2435, 2461, 2528, 2630, 2634, 2643, 2678, 2680, 2703, 2712, 2715. (ST) H. C. S. Thom on 2435. W. H. Gardner, Jr., and Donald H. Kline on 2461. Eduard Luss on 2528. A. A. Eremin on 2630. H. L. Su on 2634. A. R. Oliver and Alixis Ostapenko on 2643. Jack R. Benjamin on 2678. Clarence J. Derrick on 2680. Glen V. Berg on 2703. Steven J. Fennes on 2712. Jack R. Benjamin on 2715.

May

Journals: Hydraulics, Sanitary Engineering, Waterways and Harbors.

2806. Sanitary Engineering Comes of Age, by P. H. Mc Gauhey. (SA) The status of sanitary engineering on the graduate level and as a profession is analyzed.

2807. Design and Stability Considerations for Unique Pier, by James Michalos and David P. Billington. (WW) Design and stability of Pier 40 in New York City are described.

2808. Mechanics of Washout of an Erodible Fuse Plug, by E. Roy Tinney and H. Y. Hsu. (HY) Laboratory and field experiments are described which were undertaken to demonstrate the feasibility of a fuse plug in the spillway of a major dam.

2809. Economics of River Bank Stabilization, by Charles Senour. (WW) The determination of costs pertaining to stabilization of the caving banks of an alluvial river and its advantages and disadvantages are presented.

2810. Seepage Through Layered Anisotropic Porous Media, by David K. Todd and Jacob Bear. (HY) The paper summarizes an investigation of seepage from leveed rivers into low-lying adjoining agricultural lands.

2811. Cathodic Protection of Marine Terminal Facilities, by Joseph Milano. (WW) The use of cathodic protection to inhibit corrosion of steel pilings at the Port of New York Authority Marine Terminal Facilities is outlined.

2812. Fish Passage Through Hydraulic Turbines, by Glenn H. Von Gunten. (HY) This paper reviews the basic concepts of fish passage through dams and their significance with particular reference given to passage through turbines.

2813. Hurricane Winds for Design Along the New England Coast, by C. S.

Gilman and V. A. Myers. (WW) Detailed estimates of the wind fields existing in hurricanes are studied for future protection.

2814. Aerated Flow in Open Channels, by Progress Report, Task Committee on Air Entrainment in Open Channels. (HY) An investigation of the status of present (1961) knowledge of the phenomena of aerated flow in open channels is presented.

2815. Pneumatic Breakwaters to Protect Dredges, by James L. Green. (WW) Tests of pneumatic breakwaters and models to protect dredges from long oceans swells are presented.

2816. Forms of Bed Roughness in Alluvial Channels, by D. B. Simons and E. V. Richardson. (HY) The thesis that resistance to flow and sediment transport in alluvial channels are related to the form of bed roughness is analyzed, and the forms of bed roughness in alluvial channels are described.

2817. Estimating Potential Evapotranspiration, by W. Russell Hamon. (HY) Methods of computing potential evapotranspiration by analytical procedures based on the application of the turbulent transport and energy-balance concepts are analyzed.

2818. Fisheries Statistics in Evaluating Claims of Pollution, by Roger Tillefson. (SA) Statistics evaluating claims that waste discharges are responsible for declining or fluctuating fisheries resources are studied.

2819. Groins on the Shores of the Great Lakes, by Charles E. Lee. (WW) A summary of factual data on existing groins, changes in lake levels, and designs of groins are presented.

2820. Filtration Using Radioactive Algae, by Kenneth J. Ives. (SA) A new theory of filtration using radioactive algae is studied.

2821. Deep Water Wave Generations by Moving Wind Systems, by Basil W. Wilson. (WW) This paper concerns the mathematical justification of a procedure for forecasting wave heights and periods within traveling fetches of variable wind over deep water.

2822. Discussion of Proceedings Paper 2507, 2517, 2590, 2599, 2600, 2601, 2603, 2647, 2649, 2658, 2749. (WW) Per Bruun on 2601. F. Gerritsen on 2603. R. Robinson Rowe and Otto C. von Seggern on 2647. Blair T. Bower on 2649. J. W. B. Blackman on 2658. Roy F. Bessey on 2749. M. H. Marty and E. E. Chapus on 2507. Thomas J. Fratar, Alvin S. Goodman, and Austin E. Brant, Jr. on 2517. T. P. Anantram and Shri M. G. Hiranandani on 2590. Per Bruun on 2599. T. M. Dick on 2600.

2823. Roughness Spacing in Rigid Open Channels, by William W. Sayre and Maurice L. Albertson. (HY) Experiments are analyzed in which the effect of longitudinal and transverse spacing of roughness baffles on open-channel flow is determined.

2824. Dissolved Solids Removal from Waste Water by Algae, by Albert F. Bush, John D. Isherwood, and Shiva Rodgl. (SA) Methods of reclamation of waste water for eventual re-use are presented.

2825. Eddy Diffusion in Reservoirs and Pipeline, by Frank L. Parker. (HY) Tests of eddy diffusion in pipelines are analyzed and compared with Taylor's theoretical solution.

2826. Discussion of Proceedings Paper 2407, 2411, 2472, 2657, 2663, 2701. (SA) V. J. Calise and W. A. Homer on 2407. Clair N. Sawyer and Jay S. Grumblin on 2411. Donald J. O'Connor on 2472. James Girard on 2657. George Bugliarello on 2663. P. E. Seuffer on 2701.

2827. Discussion of Proceedings Paper 2335, 2339, 2526, 2531, 2652, 2812. (HY) Steponas Kolupaila on 2335. M. B.

McPherson on 2339. Donald F. Young on 2526. W. P. Simmons, Jr. on 2531. Donald VanSickle on 2652. J. F. Muir on 2812.

June

Journals: Irrigation and Drainage, Engineering Mechanics, Highway, Soil Mechanics and Foundations, Structural.

2828. Impact Waves in Sand: Theory Compared with Experiments on Sand Columns, by Blaine R. Parkin. (SM) A one dimensional theory of elastic-plastic wave propagation in a strain-rate sensitive material is compared with published experimental results on impact wave propagation in dry Ottawa and Fort Peck sands.

2829. Attenuation of Stress Waves in Bi-Linear Materials, by Richard Skalak and Paul Weidlinger. (EM) The attenuation of plane stress waves generated by a decaying surface pressure in a bi-linear medium is studied.

2830. Viscoelastic Winkler Foundation with Shear Interactions, by Arnold D. Kerr. (EM) The concept of the Pasternak-foundation, consisting of the Winkler-foundation with shear interactions, is extended to the case of viscoelastic behavior.

2831. Field Measurement of Hydraulic Conductivity, by William W. Donnan and V. S. Aronovici. (IR) A small-diameter well point that has been developed for use in the field to measure the hydraulic conductivity of sand strata is examined.

2832. Uncertainties, in Earth Dam Design, by John M. Bird. (SM) Some of the uncertainties that enter into embankment design and the methods used in the designs by the Corps of Engineers, U. S. Army, at the Terminus and the New Hogan Projects are presented herein.

2833. Intergrated Parkway and Expressway Planning, by D. Jackson Faustman. (HW) Design concepts of intergrating parking and expressway planning are studied.

2834. Outlook for Economic Use of Fresh Water from the Sea, by Samuel B. Morris. (IR) A study of the supply and demand of fresh water from the sea in relation to the cost of production, storage, and transportation is presented.

2835. Ultrasonic Evaluation of Reinforced Plastics, by Albert G. H. Dietz. (EM) Nondestructive means of evaluating composition and quality of structural reinforced plastics are analyzed.

2836. Unsteady Flow of Ground Water into Drain Tile, by R. H. Brooks. (IR) A solution to the nonlinear differential equation describing unsteady flow toward equally spaced drains above a horizontal impermeable boundary is presented.

2837. Water Table Fluctuations Induced by Irrigation, by Marinus Maasland. (IR) The theory of intermittent recharge as previously developed is extended and analyzed.

2838. Geophysics Efficient in Exploring the Subsurface, by R. Woodward Moore. (SM) Two Geophysical methods, refraction seismic and electrical resistivity, are described and examples of their application to subsurface problems are presented.

2839. Discussion of Proceedings Paper 1826, 2216, 2431, 2522, 2618, 2626, 2746. (SM) Committee on Glossary of Terms and Definitions in Soil Mechanics and Foundations Division on 1826. H. B. Seed and C. K. Chan on 2216. D. H. Trollope and C. K. Chan on 2341. James K. Mitchell on 2522. Edward F. Lobacz on 2618. Aleksandar B. Vesic on 2626. K. Y. Lo and M. Arnold on 2746.

2840. Discussion of Proceedings Paper 2530, 2671, 2672, 2673. (IR) Charles

W. Thomas on 2530. William H. Donnan and Charles H. Lee on 2671. George H. Hargreaves on 2672. Vahe J. Sevan and Kamil Taj-Eddin on 2673.

2841. Discussion of Proceedings Paper 2412, 2417, 2677. (HW) Ira B. Mullis on 2412. William R. McCononchie on 2417. William Zuk, Howard Newlon, Jr., R. A. Mitchell, and Bengt F. Friberg on 2677.

2842. Discussion of Proceedings Paper 2516, 2575, 2578, 2629, 2627, 2343, 2445, 2498, 2686, 2688, 2690, 2748. (EM) Melvin L. Baron and Mario G. Salvadori on 2516. Ernest T. Selig, Keith E. McKee, and Eben Vey on 2575. Raymond A. Hill on 2578. Enno Penno on 2624. A. Assur on 2627. G. N. Bycroft on 2343. Manuel Stein on 2445. George E. Mase on 2498. H. L. Sujata and Hans Conrad on 2686. S. K. Ghaswala on 2688. Le-Wu Lu on 2690. Glenn B. Woodruff on 2748.

2843. Philosophical Aspects of Structural Design, by Hsuan Loh Su. (ST) Presented herein are some philosophical aspects of structural design, such as the concept of safety, differences between the required and the available safety factor, and mechanistic criteria of design.

2844. Postbuckling Behavior of Flat Plates, by J. R. Jombock and J. W. Clark. (ST) The essential features of postbuckling behavior of flat plates are described briefly, and concepts such as "effective width" and "crippling strength" are illustrated.

2845. Steel Frame Folded Plate Roof, by Oliver A. Baer. (ST) A development of space structures utilizing conventional framed trusses as basic units is analyzed.

2846. Discussion of Proceedings Papers 2384, 2410, 2428, 2437, 2441, 2446, 2470, 2480, 2496, 2640, 2643, 2650, 2674, 2630, 2692, 2693, 2703, 2712, 2715, 2802. (ST) George Winter on 2384. Guido Oberti on 2410. Gor-

don P. Fisher on 2428. Ray W. Clough on 2437. Joseph Penzien on 2441. Joseph J. Bonasia on 2446. Wayne C. Lewis on 2470. Theodore V. Galambos on 2480. Ivan M. Viest on 2496. John C. Brough, Jr. and B. H. Stephens, Jr. on 2630. Hubert Woods on 2640. Guilianno Augusti on 2643. Bruce G. Johnston on 2650. Tadeusz Janiszewski on 2674. A. A. Eremin on 2680. Sven H. Wichman on 2692. D. H. Pletta and J. H. Sword on 2693. A. G. Davenport on 2703. Harold G. Lorsch on 2712. C. Berwanger on 2715. Cedric Marsh on 2802.

July

Journals: Power, Surveying and Mapping, Hydraulics, Sanitary Engineering.

2847. Studies for the Lower Monumental Power Plant, by Benjamin F. Smith. (PO) The study and analysis summarized herein demonstrate procedures used to optimize net power by balancing economic factors.

2848. Surveys for Spacecraft Tracking Sites, by Robert C. Wigand. (SU) Applications of surveying in spacecraft tracking are presented.

2849. Water Surface Profiles in Irregular Natural Streams, by Praxitelis A. Argyropoulos. (HY) A relatively simple and practical method is proposed for the computation of water surface profiles in natural streams or reservoirs.

2850. Power from the Sea, by El Sayed Mohamed Hassan. (PO) A plan to generate electricity economically from the loss of water in the Red Sea is presented.

2851. End Depth at a Drop in Trapezoidal Channels, by M. H. Diskin. (HY)

The momentum equation is used to derive a general equation for the end depth in prismatic channels on mild slopes at an abrupt drop.

2852. Oroville Dam and Appurtenant Features, by W. G. Schulz, D. P. Thayer, and J. J. Doody. (PO) A study of the highest dam in the United States is presented.

2853. Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction, by Progress Report of the Committee on Engineering Surveying of the Surveying and Mapping Division. (SU) The need for precise vertical control as well as precise horizontal control when executing a major water crossing is outlined herein.

2854. Synthetic Unit Hydrographs for Small Watersheds, by Don M. Gray. (HY) A method is presented herein in which the unit graph for small watersheds can be synthesized from measurable topographic characteristics.

2855. Glen Canyon Powerplant, by Samuel Judd. (PO) The principal features of the Glen Canyon Powerplant in Arizona are described.

2856. Model and Prototype Research on Fish Ladders, by Berton M. Maclean. (PO) A resume of the many fishery and hydraulic model studies that were conducted on the Columbia River is presented.

2857. Private Power Development on an Entire River, by Richard S. Woodruff. (PO) The development of a complete river by one company for hydro-electric power production is described.

2858. Sanitary Consideration of Five-Mile Ocean Outfall, by Charles H. Lawrence. (SA) Engineering considerations that led to the establishment of the basic and detailed design of a submarine effluent outfall are studied.

2859. Surveying and Mapping Division, 1925-1960; Report of the Chairman, Executive Committee, by Arthur J. McNair. (SU) The history of the Surveying and Mapping Division of the American Society of Civil Engineers is outlined herein.

2860. Trickling Filtration Design and Performance, by W. Wesley Eckenfelder, Jr. (SA) An attempt to statistically correlate filter performance and develop generalized design formulations for domestic sewage treatment is analyzed herein.

2861. Cooling Pond Design in the Southwest, by T. J. Cotter and A. W. Lotz. (PO) Factors considered in the design of a cooling pond and their application are presented.

2862. Sanitary Engineering Education in a Changing World, by Daniel A. Okun. (SA) An analysis of the requirements for the education of sanitary engineers is presented.

2863. Manifold Stilling Basin, by Gene R. Fiala and Maurice L. Albertson. (HY) The manifold stilling basin used as a device for dissipating excess kinetic energy is studied.

2864. Drawdown Around a Partially Penetrating Well, by Mahdi S. Hantush. (HY) Equations of unsteady drawdown around a well partially screened in and steadily discharging from an artesian aquifer of uniform thickness and uniform hydraulic properties are developed.

2865. Continuous Parabolic Interpolation, by Willard M. Snyder. (HY) A method is presented by which interpolation on a continuously transforming parabola produces smooth curves through a set of data points.

2866. Use of Computers for Kansas River Flood Studies, by William L. Northrop and Clarence W. Timberman.

(HY) A general digital computer program is described that produces flow hydrographs for an extensive network of basin subareas using unit hydrographs and routing coefficients.

2867. Some Legal Aspects of Sedimentation, by C. E. Busby. (HY) Legal aspects of sedimentation, important to the engineer, geologist, and soil scientist, are presented.

2868. Discussion of Proceedings Paper 2515, 2568, 2569, 2709, 2714. (PO) R. N. Bergstrom, J. R. Arena, and J. M. Kramer on 2515. G. S. Sarkaria and R. P. Wengler on 2568. G. S. Sarkaria and J. A. Veltrop on 2569. George Bugliarello on 2709. Charles Jaeger on 2714.

2869. Discussion of Proceedings Paper 2718. (SA) H. G. Aronson on 2718.

2870. Discussion of Proceedings Paper 2702. (SU) Shu-t'ien Li on 2702.

2871. Free Surface Flow in Homogeneous Porous Medium, by Roger J. M. DeWiest. (HY) The damping of the unsteady flow through a dam or levee with horizontal underdrain is analyzed.

2872. Discussion of Proceedings Paper 2362, 2369, 2374, 2438, 2452, 2652, 2653, 2706, 2713, 2776, 2780, 2763, 2260. (HY) W. M. Snyder on 2362. Emmett M. Laursen on 2369. Charles M. Moore on 2374. F. Wayne Townsend and F. A. Blust on 2438. W. M. Borland and Carl R. Miller on 2452. Phillip R. Smith on 2652. F. V. A. Engel, N. Rajaratnam, and Herman J. Koloseus on 2653. Harold G. Lorsch on 2706. M. B. McPherson on 2713. J. C. Stevens on 2776. H. C. Riggs on 2780. W. D. Baines and J. F. Keffer on 2763. Shoi-Yean Hwang on 2260.

2873. Measurement of Displacement and Deformation by Geodetic Methods, by F. Kolbold. (SU) Geodetic methods used for the measurement of terrain movements and deformations in structures are explained.

2874. A Survey of Sanitary Landfill Practices, by the Thirtieth Progress Report of the Committee on Sanitary Engineering Research. (SA) Technical data on sanitary engineering practices are presented.

August

Journals: Air Transport, Engineering Mechanics, Soil Mechanics and Foundations, Structural, Waterways and Harbors.

2875. Operative Energy Concept in Marine Fendering, by Shu-t'ien Li. (WW) This paper develops operative energy concept in marine fendering, variable design factors, and ship impact energy evaluation.

2876. Economic Evaluation of Inland Waterway Projects, by Shu-t'ien Li and Eric E. Bottoms. (WW) Basic data requirements for economic evaluation of inland waterway projects are summarized and some of the current evaluation practices are given.

2877. Steel Pile Marine Corrosion and Cathodic Protection, by Carter Hale Horton. (WW) Corrosion which occurs on marine structures, and the use of cathodic protection to prevent such corrosion are presented herein.

2878. Foundation Stability for a Submarine Liquid Sulphur Pipeline, by Basil W. Wilson. (SM) This paper examines the vertical and lateral stability of a 7-mile long hot sulphur pipeline entrenched in sediments between Louisiana and an offshore sulphur mine.

2879. Torsional Behavior of Suspension Bridge Towers, by Frank Baron and Anthony G. Arioto. (ST) An interpretive study is presented of the influences of different variables on the torsional behaviors of suspension bridge towers.

2880. Hydrodynamics of Flow into Curb-Opening Inlets, by Richard J. Wasley. (EM) A theoretical analysis of the hydrodynamic problem associated with the curb-opening inlet is presented.

2881. Cohesion After Non-Hydrostatic Consolidation, by John H. Schmertmann and John R. Hall, Jr. (SM) The effect of non-hydrostatic consolidation on the cohesion and friction in two saturated clays was studied. The results showed that cohesion is unaffected by non-hydrostatic consolidation.

2882. Stability of Frames in the Presence of Primary Bending Moments, by E. F. Masur, I. C. Chang, and L. H. Donnell. (EM) A systematic method of analyzing the stability of frames against sidesway buckling is developed.

2883. Columbia River Ship Channel Improvement and Maintenance, by Robert E. Hickson. (WW) A practical solution for design of channel improvement and control works on the Co-

lumbia River and the beneficial effects of such works are described.

2884. Analysis of Frames Loaded into the Plastic Range, by Morris Ojalvo and Le-Wu Lu. (EM) A precise method of analyzing plane frames stressed into the inelastic range is presented. A complete example is included to illustrate the technique developed.

2885. Secondary Compression of Clays, by K. Y. Lo. (SM) Results of long term consolidation tests on five remolded and two undisturbed clays are reported.

2886. Corrosion of Steel Piles in Salt Water, by James R. Ayers and Ralph C. Stokes. (WW) This paper presents the results of a survey made by the Navy of steel sheet piling in bulkheads of eight widely scattered shore stations.

2887. Analysis of Noncoplanar Elastic Rings, by D. H. Pletta, W. C. Llesner, and Yen-Ming Yeh. (EM) The six scalar equations required to determine the components of the indeterminate moments and forces in loaded or distorted elastic rings are derived using vector algebra.

2888. Harbor Paradox, by John Miles and Walter Munk. (WW) Resonant frequencies that have been derived for rectangular harbors are studied.

2889. Conference Remarks Report of the ACC-ASCE Joint Conference Committee. (AT) The several introductory and background presentations made to the May, 1961 ACC-ASCE Joint Conference on Increasing Airport Capacity are presented in three sections: "Introduction," "Welcome," and "Airport Capacity and Safety."

2890. Determining Airport Needs for the Future, by George De Ment. (AT) Presents the steps in arriving at an airport master plan for an area outlined, including a traffic forecast and an existing-airport capacity determination.

2891. Importance of Regional Airport System Planning, by Ray O. Kusche. (AT) An adequate air transportation system will result in problems that call for joint action. Development of a plan is the responsibility of communities served by the airport.

2892. Airport Design by Economic Analysis, by Paul H. Stafford and Martin A. Warskow. (AT) The factors that affect practical airport capacity are enumerated, and quantitative examples of their effects are given.

2893. New Developments in Terminal Air Traffic Control, by Walter N. Pike. (AT) Studies are being made of the air traffic control problem on a total system basis. Recently developed equipment is described, and illustrations as to its use are presented.

2894. Trends in Aircraft Design Affecting the Airport, by Ralph T. Glasson, Jr. and Weldon E. Rhoades. (AT) The airlines and aircraft manufacturers are continually striving to meet and solve airport and noise problems, as is shown herein.

2895. Summary of Symposium on Supersonic Air Transport, by Reginald J. Sutherland. (AT) Aircraft manufacturers have studied problems that will develop with the introduction of supersonic passenger planes, including design and operation of these planes and the method of handling at airports.

2896. Location and Number of Exit Taxiways, by Robert Horonjeff. (AT) This paper describes the techniques applied to the evaluation of airport configuration from the standpoint of aircraft traffic potential.

2897. Aircraft Runway Arresting Barriers, by Apostolos H. Zonars. (AT) Aircraft runway arresting barriers consisting of two elements, the engaging device and the energy absorber, are described.

2898. Recent Developments in Airport Lighting, by D. M. Finch. (AT) Airport lighting problems are many and varied in complexity. The application of present knowledge to airports and aircraft should permit reliable operation in almost all weather conditions.

2899. Summary of Prestressed Concrete Pavement Practices, by Frank M. Mellinger. (AT) This paper, by means of references, summarizes the development of design criteria for such pavements and reviews the types of construction used for prestressed concrete runway and taxiway pavements.

2900. Need for More Air Terminal Gates, by Thomas M. Sullivan. (AT) The introduction of jet aircraft into existing terminal facilities has caused the handling of fewer planes from existing gates.

2901. Parking and Circulation of Vehicular Traffic at Airports, by Israel Gilboa. (AT) Methods and procedures for studying and evaluating vehicular traffic are indicated. The material can be used as a general guide for development of essential data pertinent to any airport.

2902. Field Study of a Cellular Bulkhead, by Ardis White, James A. Cheney, and C. Martin Duke. (ST) A detailed experiment analysis is presented of the structural behavior of a segment of a steel sheet pile cellular bulkhead.

2903. Dead-Load Stress in Model Dams by Method of Integration, by Jerome M. Raphael. (ST) An experimental technique is described for determining dead-load stresses in dams.

2904. General Solution of Space Frameworks, by Ignacio Martin and Jose E. Hernandez. (ST) The slope-deflection-rotation method that is applied to space frameworks is presented.

2905. Pile Heave and Redriving, by Earle J. Klohn. (SM) Detailed field data with analyses pertaining to pile-heave problems that developed during construction of end-bearing pile foundations for an industrial plant are presented.

2906. Grid Analysis by the Reaction Distribution Method, by Irving Fader. (ST) Presents a

convergence process that is based on the stiffness characteristics of the members in the system.

2907. Uniformly Moving Load on a Layered Half Plane, by J. L. Sackman. (EM) Steady state displacements and stresses produced in a two layered elastic half plane are determined for dilatational and distortional potentials.

2908. Bending of Rectangular Plates, by Mourir Badir. (ST) Rectangular plates are solved numerically via a structural model.

2909. Conjugate Beam Simulated by Electric Circuits, by S. Freilberg. (EM) An analogy in beam bending is made with electric circuits. Voltages, currents, and resistances simulate moments, forces, and lengths.

2910. Further Studies of the Strength of Beam-Columns, by Robert L. Ketter. (ST) The results of an investigation of the ultimate carrying capacity of beam-columns are presented.

2911. Method of Internal Constraints and Its Application, by Enrico Volterra. (EM) An approximate method is presented and applied which unifies a number of engineering theories in the statics and dynamics of bar plates.

2912. Impact Waves in Sand: Implications of an Elementary Theory, by Blaine R. Parkin. (SM) A theoretical study of impact wave propagation in dry sand compared with elastic and elasto-plastic theories of wave propagation.

2913. Strength of Plate Girders in Bending, by Konrad Basler and Bruno Thurlimann. (ST) The study of girders subjected to bending is used to derive a design concept.

2914. Discussion of Proceeding Paper 2423, 2658, 2729, 2733, 2749. (WW) Omar J. Lillevang on 2423. Omar J. Lillevang on 2658. Charles E. Behlke, John B. Herbich, and Alf H. Sorensen on 2729. Glenn B. Woodruff, Richard S. Winkler, and Joseph H. Finger on 2733. A. C. Rayner on 2749.

2915. Discussion of Proceedings Paper 2544, 2545, 2633, 2634, 2678, 2704, 2764. (ST) Donald A. Sawyer on 2544. Joseph Penzien on 2545. M. J. Gutzwiller and F. E. Musleh on 2633. Kurt H. Gerstle on 2634. George B. Begg, Jr. on 2678. M. Gregory on 2704. Jack R. Benjamin and Theodore C. Zsutty on 2764.

2916. Discussion of Proceedings Paper 2332, 2500, 2502, 2615, 2616, 2690, 2728, 2731, 2736, 2801. (EM) O. C. Zienkiewicz on 2332. George Hermann and Anthony Armenakas on 2500. Ladislav B. Kriz and Seng-Lip Lee on 2502. Morris Ojalvo on 2615. P. Gondikas and Mario G. Salvadori on 2616. G. C. Reynolds on 2690. Shan S. Kuo on 2728. A. A. Eremin on 2731. Stanley Morse on 2736. Le-Wu Lu on 2801.

2917. Discussion of Proceedings Paper 2368, 2564, 2623, 2681, 2746, 2791, 2793, 2794, 2795. (SM) W. Heukelom and C. R. Foster on 2368. F. E. Richart, Jr. on 2564. Harry R. Cedergren on 2623. Stafford C. Happ on 2681. William

Daniel Finn, B. V. Ranganatham, and I. da Silveira on 2746. Judson P. Elston on 2791. I. Alpan and Judson P. Elston on 2793. Judson P. Elston on 2794. Judson P. Elston on 2795.

September

Journals: City Planning, Highways, Hydraulics, Irrigation and Drainage, Professional Practice, Sanitary Engineering.

2918. Discussion of Proceedings Paper 2607, 2663, 2701, 2767. (SA) N. Claes H. Fischerstrom on 2607. Vaughn C. Behn on 2663. Thomas R. Camp on 2701. Gilbert H. Dunstan on 2767.

2919. Discussion of Proceedings Paper 2592, 2677, 2766. (HW) William H. Gotolski on 2592. I. J. Taylor on 2677. Herbert G. Bossy on 2766.

2920. Discussion of Proceedings Paper 1997, 2311, 2551, 2756, 2765, 2772, 2780, 2823. (HY) Edward N. Whitney, Joe M. Lara, and Kenneth B. Schroeder on 1997. Ronald T. McLaughlin on 2311. William Haushild and Gordon Kruse on 2551. Paul F. Keim and Vito A. Vanoni on 2576. Charles E. Behlke and James R. Steven on 2765. John Parmakian on 2772. Kenneth W. Wise on 2780. P. F. Biery and J. W. Delleur on 2823.

2921. Effect of Hydrogen Sulfide on Concrete Structures, by Bernal H. Swab. (SA) A study was made of the factors contributing to the generation of hydrogen sulfide and the resultant effect on concrete structures.

2922. Pipeline Location: Location Surveys, Progress Report, Committee on Pipeline Location. (PL) The purpose and generalized procedure of pipeline location surveys are presented, with emphasis on features of detail location and data required for design and special permits.

2923. Aqueduct Capacity Under an Optimum Benefit Policy, by Warren A. Hall. (IR) Dynamic programming is used to derive a procedure for determining the capacity required for various reaches of an aqueduct based on a policy of optimum net benefit.

2924. Hydraulic Design of Hollow-Jet Valve Stilling Basins, by G. L. Beichley and A. J. Peterka. (HY) Tests made to generalize and prove the hydraulic design of a new type of stilling basin which utilizes the hollow-jet valve for discharge control are described.

2925. Prediction of Cavitation Damage, by N. S. Govinda Rao and A. Thiruvengadam.

(HY) A non-dimensional number called cavitation damage number has been proposed, based on the concept of dynamic indentations produced by short range shock-waves due to the collapse of the cavitation bubbles.

2926. Observations on Urban Transportation, by Luther Gulick. (CP) This paper presents an analysis of the interrelated economic factors involved in the design of an urban transportation system to meet the circulation demands of the urban complex.

2927. Vibration of Gates During Overflow and Underflow, by Eduard Naudascher. (HY) Model studies have been made to evaluate frequency and magnitude of the exciting forces for different types of gates and aprons.

2928. Irrigation and Drainage Studies of Texas Rivers, by Rolland F. Kaser. (IR) The U. S. Study Commission approach to comprehensive planning, involving collaboration by local, state, and federal governments, is explained.

2929. Consumptive Use and Water Waste by Phreatophytes, by Harry F. Blaney. (IR) Results of measurements of consumptive use by phreatophytes are presented.

2930. Pressures on Spillway Flip Buckets, by Armando Ballofet. (HY) Studies were made to compare the pressures on cylindrical flip buckets, both for chute and tunnels spillways, as computed by theoretical considerations and as measured in model investigations.

2931. Planning and Engineering Considerations for the Official Map, by Kurt W. Bauer. (CP) Means of making the official map a useful device for plan implementation and of providing adequate horizontal control in urban areas are considered.

2932. Relationship of Compression Ratio to Gas Pipelines, by Raymond R. Crawford. (PL) The application of the concept of low compression ratio—high mean effective pressure to the design and operation of gas transmission pipeline systems.

2933. Estimating the Probable Maximum Precipitation, by David M. Hershfield. (HY) A method for the systematic analysis of precipitation data for the purpose of estimating the probable maximum precipitation is proposed.

2934. The Terminal Shape of a Shallow Liquid Front, by E. Roy Tinney and D. L. Bassett.

(HY) The equations for the shapes of long, shallow laminar and turbulent fronts advancing at constant velocity down dry open channels are derived.

2935. Free Streamline Theory for Segmental Jet Deflectors, by E. Roy Tinney, Wilfred E. Barnes, Otis W. Rechar, and Glenn R. Ingram. (HY) Free streamline theory is applied to the determination of the exit angle of a jet of water leaving a deflector, such as a spillway flip bucket.

2936. Uniform Flow in a Shallow, Triangular Open Channel, by Richard J. Wasley. (HY) A smooth, shallow, triangular open channel was investigated to determine the characteristics of uniform flow in an idealized highway gutter.

2937. The Civil Engineer and Urban Transportation, by Jack R. Blackburn. (HW) The rapidly growing transportation problem in urban areas is pointed out. Steps are described which would contribute to a general solution of the problem.

2938. Land Use and Expressways, by Fred W. Tuemmler. (CP) Land use—expressway relationships are discussed, and various suggestions for improvement are given.

2939. Fundamentals of Cathodic Protection, by Jack W. Pierce. (PL) This paper deals with the application of cathodic protection systems in conjunction with pipeline coatings to protect and extend the life of pipelines.

2940. Adhesion in Filters, by V. Mackrle and S. Mackrle. (SA) Development of the form of the adhesion criterion and filtration equations dealing with the reductions in concentration of non-homogeneous suspensions in non-homogeneous (graded) filters is described.

2941. Refuse-Sludge Composting in Windrows and Bins, by John S. Wiley and Janet T. Spillane. (SA) Successful composting was achieved at Chandler, Ariz., in tow runs involving four windrows and twenty-five aeration bins of ground refuse and refuse-sludge mixtures.

2942. Metabolism of Organic Sulfonates by Activated Sludge, by J. M. Symons and L. A. del Valle-Rivera. (SA) Studies were conducted on eight activated sludges acclimated to four simple aromatic sulfonates and four analog aromatic carboxy compounds.

2943. Aquifer Tests on Partially Penetrating Wells, by Mahdi S. Hantush. (HY) The theory of nonsteady flow toward artesian wells partially penetrating infinite nonleaky aquifers is used to outline methods for determination of formation coefficients and thickness of water-bearing formation.

2944. Discussion of Proceedings Paper 2240. (PL) S. R. Hubbard on 2240.

2945. Discussion of Proceedings Paper 2307. (CP) Eldridge Lovelace and Ramon Duran on 2307.

2946. The Soil Drainability Factor in Land Classification, by Claude L. Fly. (IR) Drainability class boundary curves were developed, relating hydraulic conductivity and depths to impervious horizons, which reflect the capability of the land for crop growth after development.

2947. Highway Pipeline Crossing Practice: Progress Report, Committee on Pipeline Crossings. (HW) The report summarizes current pipeline-crossing practice of state highway agencies and other related topics.

2948. Factors Affecting the Safe Yield of Ground-Water Basins, by John F. Mann, Jr. (IR) The origin of the term "safe yield" is presented, as are the current definitions and concepts.

2949. Discussion of Proceedings Paper 2281, 2556, 2595, 2671, 2672, 2682, 2757, 2762, 2769. (IR) Raymond C. Richter on 2281. Committee on Sanitary Engineering Research on 2556. Paul H. Berg on 2595. Harry F. Blaney on 2671. Harold D. Hafterson and Harry F. Blaney on 2672. V. S. Aronovici and W. W. Donnan on 2757. M. Ismail on 2682. Lloyd L. Harrold on 2762. Lyman S. Willardson on 2769.

October

Journals; Engineering Mechanics, Soil Mechanics and Foundations, Structural, Professional Practice.

2950. Research and Civil Engineering Education, by Nathan M. Newmark. (PP) A survey of civil engineering research efforts at colleges in the United States is reported. More funds are needed to fulfill

the needs of graduate education in this field.

2951. Research for Survival, by Arthur G. Trudeau. (PP) The objective of the Army Research and Development Program is to equip a man to work in a scientifically and technologically hostile environment.

2952. Research and the Professional Society, by Arthur T. Ippen. (PP) Responsibility of the professional society for the advancement of basic knowledge is developed in relation to the needs of modern society and the professional status of the engineer.

2953. Prestressed Bowstring Arch, by Movses Kaldjian. (ST) General expression and specific equations for solving prestressed bowstring arches with extensible suspension rods are presented. A simplified membrane-analogy method of solving the bowstring arch, and a laboratory investigation of models are included.

2954. Slope Stability Analysis by a New Graphical Method, by M. Arnold. (SM) The derivation of Bishop's equation for stability analysis of slopes and a new graphical method for its solution are presented. Stability analyses of slopes under unsubmerged and partially submerged conditions are given.

2955. Dynamic Response of Highway Bridges, by John F. Fleming and James P. Romualdi. (ST) The effects of vehicle and bridge variables on highway bridge impact are considered.

2956. String-Polygon Analysis of Frames with Straight Members, by Jan J. Tuma and John T. Oden. (ST) A general method for analyzing straight-membered plane frames of all types is presented.

2957. Stresses at a Re-Entrant Corner of a Plate, by Mario G. Salvadori. (ST) A method of determining re-entrant corners is studied.

2958. Vibration Analysis for Structural Floor Systems, by Lawrence R. Burkhardt. (ST) A graphical method for determining basic beam frequencies and maximum amplitudes of floor members, in order to control undesirable vibration in industrial structures, is presented.

2959. Simplified Design of Combined Footings, by Fritz Kramrisch and Paul Rogers. (SM) An empirical method for the design of continuous beam footings and grid and mat foundations is presented.

2960. Effect of Structure and Foundation Interaction, by Daniel L. Lycan and Nathan M. Newmark. (EM) Models of structures are analyzed to study errors that may occur when the record of foundation motion of one structure is used to determine the response of a dissimilar structure.

2961. Elastic Rayleigh Wave Effects Due to Nuclear Blasts, by M. L. Baron and Charles Lecht. (EM) Results are presented for the stresses and displacements due to Rayleigh Waves that are produced by transient normal pressure distributions on the surface of a homogeneous and isotropic semi-infinite elastic half-space.

2962. Multiple Ribless Shells, by Anton Tedesco. (ST) An analytical approach to the design of multiple ribless concrete shells is confirmed by the results of large scale model tests.

2963. Deflection Theory of Arches, by S. O. Asplund. (ST) Influence coefficient expressions are developed in matrix form for all section forces of an arch.

2964. Interfacial Mixing in Stratified Flow, by Enzo Oscar Macagno and Hunter Rouse. (EM) Laboratory experiments and results on the interaction of two superposed fluid streams of equal thickness and slightly different density, moving in opposite directions at essentially the same velocity, are presented.

2965. Displacement of Long Footings by Dynamic Loads, by William L. Wal-

lace. (SM) A mathematical expression for the displacement of a long footing subjected to a peak triangular force pulse is developed from theoretical considerations.

2966. Tank Foundations in Eastern Venezuela, by Emery Carlson and Stephen Fricano. (SM) Design considerations for foundations for steel petroleum storage tanks in Eastern Venezuela are analyzed, including predicted settlements, shear failure, plastic flow, and overturning.

2967. Strength of Plate Girders in Shear, by Konrad Basler. (ST) Shear strength of plate girders is studied. New design rules are proposed and checked with ultimate load tests.

2968. Strength of Plate Girders Under Combined Bending and Shear, by Konrad Basler. (ST) Possible interaction between bending moments and shear forces on the carrying capacity of plate girders is examined. Based on theory and experiment, approximations suitable for design are suggested.

2969. Recent Advances in the Design and Behavior of Concrete Bridges, by Hubert Rusch. (ST) Principal factors influencing advances in concrete bridge design are examined. Among these are the use of high strength concretes and steels, development of prestressing, selection of structural types, and model statics.

2970. Folded Plate Structures of Light Gage Steel, by Arthur H. Nilson. (ST) A simple design theory for a new type of structure suitable for long spans is presented and tested.

2971. Analysis of Seepage Problems, by Milton E. Harr and Robert C. Deen. (SM) A problem involving flow of groundwater is solved by use of potential theory, elliptic integrals, theory of complex variables, and conformal mapping; results are summarized.

2972. Discussion of Proceedings Papers 2574, 2791, 2793, 2832. (SM)

E. A. L. Smith on 2574. R. H. Grice on 2791. Richard R. Schindler on 2793. B. V. Ranganatham on 2832.

2973. Discussion of Proceedings Papers 2624, 2627, 2690, 2790. (EM) Robert K. Wen on 2624. G. Y. Sebestyan and F. Pennar on 2627. Annabel Tong on 2690. Richard G. Troy on 2790.

2974. Discussion of Proceedings Papers 2542, 2552, 2555, 2650, 2674, 2680, 2693, 2703, 2712, 2715, 2721, 2779, 2845. (ST) Thomas A. Wyatt on 2542. John E. Duberg, Narbey Khachaturian, and Raul E. Fradinger on 2552. Lynn S. Beedle and Lambert Tall on 2555. J. Morley English on 2650. D. M. Brotton, N. W. Williamson, and M. Millar, Hann-sharl Bandel, W. E. Adams, Jackson L. Durkee on 2674. M. G. Salvadori and E. Heer on 2680. A. J. Durelli and T. M. Daniel on 2693. A. H. Brownfield, John H. Wells on 2703. B. J. Hartz, Phillip L. Gould on 2712. John G. Merkle, M. Gregory, A. A. Eremin on 2715. Paul H. Reimer, Miguel Angel Macías—Rendón on 2721. Alfredo H. Ang on 2779. E. I. Fiesenheiser on 2845.

2975. Atomic Power, A Failure in Engineering Responsibility, by Adolph J. Ackerman. (PP) This paper examines the application of the scientific development of atomic power for public service that has appeared on the national scene since World War II.

NOVEMBER

Journals: Hydraulics, Power, Sanitary Engineering, Waterways and Harbors.

2976. Dual Channel Stream Monitor, by S. S. Karaki, E. E. Gray, and J. Collins. (HY) The dual channel stream monitor, developed as a laboratory tool to aid hydraulic research, is an ultrasonic instrument for monitoring water surface and stream bed profiles simultaneously under dynamic conditions in an alluvial channel.

2977. Calculation of Potential Flows with Free Streamlines, by Garrett Birkhoff. (HY) A survey of methods for computing three classes of time-independent

incompressible potential flows with free streamlines is given.

2978. Study of Scour Around Spur-Dikes, by R. J. Garde, K. Subramanya, and K. D. Nambudripad. (HY) This paper describes laboratory experiments on scour around spur-dikes placed in an alluvial channel.

2979. Penstocks and Scroll Cases for Niagara Power Project, by J. Edgar Revelle and John N. Pirok. (PO) The Power Authority of the state of New York channelled water from the Niagara River above the Falls to 25 generating units at Lewiston, N.Y., with a total installed capacity of 2,190,000 kw.

2980. Stabilization of the Middle Rio Grande in New Mexico, by Robert C. Woodson. (WW) The Middle Rio Grande in New Mexico is being stabilized by use of the steel Kellner Jetty System, by the Corps of Engineers, and by the Bureau of Reclamation.

2981. Queuing Theory and Simulation in Reservoir Design, by Myron B. Fiering. (HY) The theory of queues, or waiting lines, and Monte Carlo techniques are applied to the problem of selecting the optimal design of a multi-purpose reservoir.

2982. Cyclical Variations in World-Wide Hydrologic Data, by Gordon R. Williams. (HY) Short and long-term sunspot cycles are compared with variations in world precipitation, while runoff records are expressed as ratios to the mean and as cumulative deviations.

2983. General Solution for Open Channel Profiles, by James A. Liggett. (HY) A method for computing open channel profiles that may be used generally is presented and illustrated by numerical examples.

2984. Stability of Alluvial Channels, by Francis M. Henderson. (HY) Relationships are established between Lacey's regime theory and the Shields and Einstein formulas as a basis for a more rational approach to canal design problems and the study of channel formation in natural rivers.

2985. Reclaiming Hyperion Effluent, by Finley B. Lavery, Ralph Stone, and Lawrence A. Myerson. (SA) The results of three years of continuous tests on reclaiming the Los Angeles Hyperion Plant sewage effluent for recharge well injection is described.

2986. Coliform Organisms as an Index of Water Safety, Progress Report, Committee on Public Health Activities. (SA) A study of the question of suitability of the coliform organism for judging the sanitary quality of drinking water indicates that drinking water meeting present standards has not been proven the source of water-borne disease.

2987. Bank and Levee Stabilization, Lower Colorado River, by John S. McEwan. (WW) The experiences of the USBR with problems of levee protection, bank erosion, and sedimentation on the Lower Colorado River from 1905 to 1961 and various methods for the placement of revetting materials are presented.

2988. Non-Linear Tidal Flows and Electric Analogs, by James A. Harder and Frank D. Masch, Jr. (WW) The use of electrical analogs in the investigation of non-linear tidal systems is illustrated by an electrical model of the proposed sea-level Panama Canal, and the use of non-linear elements in the analog for accurate descriptions of wave forms is examined.

2989. Land and Water Resource Planning in Texas, by Charles D. Curran and Forney W. Fleming. (WW) The United States Study Commission-Texas, a new approach by the Federal Government of coordinating Federal, state, and local interests for areawide planning for land and water resources, is examined.

2990. Total Sediment Transport in the Lower Colorado River, by John R. Shepard. (HY) Methods and results of a total sediment load sampling program by the United States Bureau of Reclamation on the Lower Colorado River between Davis Dam and Imperial Dam.

2991. Eddy Forces on Rigid Cylinders, by A. D. K. Laird. (WW) Potential theory is used to approximate forces caused by parallel neighboring cylinders

and their eddies on a vertical circular cylinder in waves.

2992. Theoretical and Practical Aspects of Well Recharge, by Paul Baumann. (HY) Hydraulically, a recharge well is far more complex than a water well in reverse. Its performance must be understood and success may be affected by practical features, such as construction.

2993. Fish Handling Facilities for Baker River Project, by Warner W. Wayne, Jr. (PO) Describes the unique structures and equipment provided for collecting and transporting upstream and downstream migrant salmon past the two relatively high concrete dams in the Baker River.

2994. Navy's New Carrier Berthing Facilities at San Diego, by D. R. Forrest and John B. Stetson. (WW) The planning and construction of the Navy's new berthing facilities for Forrestal-class aircraft carriers at San Diego are described.

2995. Current Developments in Hydroelectric Plant Design, by William H. Wolf. (PO) A resume of developments in hydroelectric plant design is presented. Scope of design is reviewed as it affects site studies, plant layout, structural problems, and preparation of costs.

2996. Jet Discharge into a Fluid with a Density Gradient, by William E. Hart. (HY) Effects of turbulent liquid jets, the primary fluid, discharging upward into liquid of greater density are determined.

2997. Effects of Water Temperature on Stream Reaeration, Thirty-first Progress Report, Committee on Sanitary Engineering Research. (SA) A series of experiments were conducted to evaluate the temperature coefficient, θ , and the reaeration coefficient, k_r , in order to study the effect of water temperature on stream reaeration rates.

2998. Underground Power Plants in Yugoslavia, by V. M. Yevdjovich. (PO) Yugoslavia has twelve underground water-power plants in operation and three under construction. Most are constructed in limestone, and the plant chamber is generally near the face of the mountain.

2999. Discussion of Proceedings Papers 2568, 2569, 2579, 2714, 2850, 2852, 2856.

(PO) L. R. Scrivner on 2568. Merlin D. Copen on 2569. Robert Alexander on 2579. D. Hugh Trollope, Ian K. Lee, and Robert E. White on 2714. George A. Whetstone on 2850. Erik Rettig on 2852. C. H. Clay on 2856.

3000. Discussion of Proceedings Papers 2577, 2772, 2776, 2814, 2816, 2823, 2849, 2865. (HY) Neal E. Minshall on 2577. David W. Appel, Charles L. Sanford, and H. L. Uppal on 2772. Eduardo Basso on 2776. Jan-Inge Kveisengen, N. Rajaratnam, and Mikio Hino on 2814. C. F. Nordin, Jr., J. K. Culbertson, Alan V. Jopling, Vito A. Vanoni, and John F. Kennedy on 2816. Jamil Malaika, T. Blench, Donald R. F. Harleman, Ralph R. Rumer, Jr., Walter Rand, Jacob W. Davidian, Rolland W. Carter, and John A. Roberson on 2823. Steponas Kolupaila on 2849. M. D. Lester on 2865.

3001. Upflow Solids Contact Basin, by A. W. Bond. (SA) Methods of separating solids from water in water treatment processes and value of "solids contact" are considered, and an example of design of a simple upflow basin is given.

3002. Research on Composting of City Refuse and Nightsoil, by Yonosuke Kaibuchi. (SA) Evaluates two types of high rate mechanical digesters and forced air curing bins, using a pilot and a proto-type plant to study composting of city refuse.

November

3003. Discussions of Proceedings Papers 2657, 2767, 2806, 2862. (SA) Werner Stumm on 2657. E. J. Kilcawley and George B. Morgan on 2767. Harold Farnsworth Gray and Kenneth D. Kerri on 2806. K. J. Ives on 2862.

3004. Discussion of Proceedings Papers 2600, 2603, 2647, 2649, 2729, 2733, 2749, 2775, 2807, 2809, 2815, 2819. (WW) Ian Larsen on 2600. H. P. Carothers on 2603. Israel H. Steinberg on 2647. Amalio Gomez on 2649. Arthur L. Collins and Ole P. Erickson on 2729. P. Leimendorfer on 2733. Otakar W. Kabelac on 2749. Dan Zaslavsky on 2775. Palmer W. Roberts on 2807. Howard J. Mullaney on 2809. J. B. Schiff on 2815. A. C. Rayner and R. I. Rector on 2819.

December

Journals: Engineering Mechanics, Irrigation and Drainage, Soil Mechanics and Foundations, and Structural.

3005. Tolerance of Plants to Salinity, by Leon Bernstein. (IR) Irrigation water quality can be assessed only if the conditions under which the water will be used are considered.

3006. Unification of Parshall Flume Data, by Sidney Davis. (IR) Results of the Parshall flume calibrations have always been presented in the form of empirical formulas. A semi-theoretical analysis enables the data for free flow to be presented in a non-dimensional unified form.

3007. The Friant-San Joaquin River Litigation, by Charles H. Lee. (IR) The decision in Rank versus Krug, March 31, 1961, firmly upholds the legal status of property rights to water in western states, and adopts a physical solution making possible maximum use of a variable flow stream.

3008. Influence of Geological Conditions on Uplift, by W. Harold Stuart. (SM) The influence of geological conditions on uplift as indicated by observations at a number of concrete gravity dams is presented.

3009. Equations for Plate-Beam Systems in Transverse Bending, by Alfredo H.-S. Ang and Wallace Prescott. (EM) Recurrent equations for combined plate-beam systems are derived on the basis of a discrete model that has previously been shown to be the finite difference analog of the continuum model of a plate.

3110. Economy of High Strength Steel Structural Members, by Geerhard Haaljer. (ST) Structural members are analyzed to determine influence of yield stress, modulus of elasticity, and price of proportioning of such members. The application of higher strength steels can lead to significant material-cost savings for lighter weight structures.

3011. Design Method for Interceptor Drains in Heterogeneous Soil, by R. William Nelson. (IR) A method for including variable permeability in a design procedure for interceptor drains is presented in three steps.

3012. Multiple Soil Sampler, by P. J. Parsons. (SM) A portable sampling device, designed for tracing radioactive migration through the soil, has been invented that collects several samples of granular, cohesionless soil in one operation.

3013. Electronic Analog Computers for Laminar Flow Problems, by Donald F. Young. (EM) A simple technique for the use of an electronic analog computer to determine velocity distribution in both steady and unsteady uniform laminar flow problems is described, and examples are given.

3014. Restraint of Structures Attached to Mass Concrete, by Keith Jones. (ST) Results of a

comparison of measured length changes, due to climate temperature changes, in the concrete near the facts of three large dams are presented. An equation for computing restraint of length change by the mass concrete is derived.

3015. Effect of Filtering on Model Recharge Wells, by Leonard Schiff. (IR) Results of experiments on filtered and unfiltered river water flowing through model recharge wells are presented. It was found that water flowing over filter material removed clogging particles.

3016. Post-Elastic Behavior of Wide-Flange Steel Beams, by Herbert A. Sawyer. (ST) Experimentally determined ultimate strengths and beams subjected to uniform moment gradients are presented and used to establish general expressions for moment-curvature relationships of such beams.

3017. Bending and Stretching of Laminated Aeolotropic Plates, by Yehuda Stravsky. (EM) A linear theory is established for a general multi-layer aeolotropic plate subject to in-plane forces and transverse loading. It is shown that a coupling phenomenon occurs between in-plane forces and transverse bending.

3018. Variational Methods in Fluid Dynamics, by J. W. Delleur and A. A. Sooky. (EM) The variational principle, and its application to steady, incompressible, laminar flows is presented. The method is applied to the computation of the velocity distribution for laminar flow in circular, square, and rectangular ducts in a form suited for machine computation.

3019. Buckling Behavior above Tangent Modulus Load, by Bruce G. Johnston. (EM) Computer simulated tests of aluminum alloy struts are presented. Certain aspects of inelastic behavior between the tangent modulus and ultimate loads are clarified and the actual ultimate or "Shanley" load is evaluated.

3020. Static and Dynamic Behavior of Small Footings, by E. T. Selig and K. E. McKee. (SM) The static bearing capacities of small footings resting on sand and subjected to static and dynamic loads are compared with Terzaghi's equations. The energy of impact, created by a falling weight, is correlated with footing settlement.

3021. Use of Elastomeric Pads as Bearings for Steel Beams, by Hardy E. Fairbanks. (ST) A laboratory investigation to determine the adequacy of elastomeric bearings for steel highway bridges is reported. Tests of bearings and a survey of development of neoprene bearings are described.

3022. Reinforced Masonry Design and Practice, Progress Report, Task Committee on Reinforced Masonry Design and Practice, Committee on Masonry and Reinforced Concrete. (ST)

This report sets forth a recommended practice for the design and construction of reinforced masonry structures. It is intended as an aid to engineers so that they may more readily design masonry structures and guide builders in masonry construction.

3023. Experimental and Analytical Study of a Folded Plate, by A. C. Scordelis, E. L. Croy, and L. R. Stubbs. (ST) A study of a simple-span aluminum folded plate model consisting of three north-light shells is presented. Values of longitudinal stresses, transverse moments, and vertical joint deflections determined experimentally and analytically are compared.

3024. Stresses in Ring Stiffeners in Cylinders, by Wadi S. Rumman. (ST) A semi-empirical approach is presented for determining the forces acting on ring stiffeners in long thin-walled cylinders subjected to bending. Included are the results of experimental work and some approximate theoretical investigations.

3025. Moments at Selected Points in Continuous Girders, by George H. Dell. (ST) Equations and criteria are presented for use in computing the ordinates and the areas under the influence lines for moment at any point in uniformly loaded prismatic girders of continuous structures.

3026. Stability in a Continuously Stratified Fluid, by Philip G. Drazin and Louis N. Howard. (EM) Techniques previously used by the writers for the study of stability in a homogeneous flow are applied to problems with density stratification. Results are restricted to instabilities of large wave length.

3027. Range of the Yield Condition in Ideal Plasticity, R. M. Haythornthwaite. (EM) The properties of ideal rigid-plastic solids are used to define bounding yield conditions that remain valid when test results are available for a limited number of stress combinations.

3028. Effect of Joint Rotation on Dynamics of Structures, by Moshe F. Rubinstein and Walter C. Hurty. (EM) The results of a study on the effect of joint rotation on the dynamic characteristics of a multi-story frame structure are presented.

3029. Discussion of Proceedings Papers 2477, 2528, 2678, 2802, 2843, 2845, 2879, 2908, 2910. (ST) S. L. Lee and P. C. Patel on 2477. H. N. Hill, J. W. Clark, and R. J. Brungraber on 2528. C. B. Brown on 2678. T. V. Galambos on 2802. A. H. Metcalfe on 2843. G. G. Goble, Jacob Eldar, and Abraham Woolf on 2845. Thomas R. Kuesel on 2879. Mario G. Salvadori on 2908. Phillip L. Gould and Morris Ojalvo on 2910.

3030. Discussion of Proceedings Papers 2627, 2731, 2736, 2748, 2790, 2801, 2880, 2909. (EM) G. G. Meyerhof on 2627. Melvin L. Baron, Hans H. Bleich, and Paul Weidinger on 2731. Cesar A. Sciammarella and August J. Durelli on 2736. William Weaver, Jr., on 2748. John A. Blume on 2790. Seng-Lip Lee, T. M. Wang, and J. S. Kao on 2801. James A. Liggett on 2880. Campbell Massey on 2909.

3031. Discussion of Proceedings Papers 2669, 2672, 2673, 2761, 2762, 2836. (IR) Mustaq Ahmad on 2669. Wendell C. Munson on 2672. Stanley S. Butler on 2673. Mahdi S. Hantush on 2761. H. C. Aslyng and K. J. Kristensen on 2762. Suresh P. Braha on 2836.

3032. Discussion of Proceedings Papers 2618, 2791, 2794, 2796, 2797, 2828, 2832, 2885, 2905. (SM) H. B. Dickens on 2618. Emile Huni and John E. Wagner on 2791. Robert E. White on 2794. Judson P. Elston, E. S. Bell, and John E. Wagner on 2796. Judson P. Elston on 2797. H. G. Hopkins, Robert E. Fulton and A. J. Hendron, Jr., and E. T. Selig and E. Vey on 2828. Harry R. Cedergren, R. C. Harlan, and Charles S. Hedhes on 2832. T. K. Chaplin on 2885. Stephen M. Olko on 2905.

1961 PROCEEDINGS SUBJECT INDEX

AERATION

- "Aerated Flow in Open Channels: Progress Report, Task Committee on Air Entrainment in Open Channels, Committee on Hydromechanics, Hydraulics Division," Norman H. Brooks, Chrm (May HY3:73:2814)

AGGREGATES AND AGGREGATION

- "Aggregates and Fly-Ash Concrete for Barley Lock," Louis Campbell, Jr. (Mar CO1:1:2759)
- "Blending Natural Earth Deposits for Least Cost," J. B. Ritter and L. R. Shaffer (Mar CO1:39:2773)

AIRCRAFT

- "Aircraft Runway Arresting Barriers," Apostolos H. Zonars (with discussion), (Aug AT2:121:2897)
- "Airplane Performance and the Small Airport," Walter E. Gillfillan (Mar AT1:1:2758)
- "Runway Roughness Studies in the Aeronautical Field," John C. Houbolt (Mar AT1:11:2774)
- "Summary of Symposium on Supersonic Air Transport," Reginald J. Sutherland (with discussion), (Aug AT2:89:2890)
- "Trends in Aircraft Design Affecting the Airport," Ralph T. Glasson, Jr., and Weldon E. Rhoades (with discussion), (Aug AT2:73:2890)

AIRPORT MASTER PLANNING

- "Determining Airport Needs for the Future," George DeMent (with discussion), (Aug AT2:15:2890)

AIRPORTS

- "Airplane Performance and the Small Airport," Walter E. Gillfillan (Mar AT1:1:2758)
- "Airport Design by Economic Analysis," Paul H. Stafford and Martin A. Warskow (with discussion), (Aug AT2:29:2890)
- "Conference Remarks: Report of the AOC-ASCE Joint (May 1961) Conference Committee," Robert Horonjeff; George DeMent; Jerome Lederer (Aug AT2:1:2889)

- "Importance of Regional Airport System Planning," Ray O. Kusche (with discussion), (Aug AT2:21:2890)

- "Location and Number of Exit Taxicabs," Robert Horonjeff (with discussion), (Aug AT2:99:2897)

- "Need for More Air Terminal Gates," Thomas M. Sullivan (Aug AT2:179:2897)

- "New Developments in Terminal Air Traffic Control," Walter N. Pike (with discussion), (Aug AT2:55:2890)

- "Parking and Circulation of Vehicular Traffic at Airports," Israel Gilboa (Aug AT2:187:2897)

- "Recent Development in Airport Lighting," D. M. Finch (with discussion), (Aug AT2:133:2897)

- "Runway Roughness Studies in the Aeronautical Field," John C. Houbolt (Mar AT1:11:2774)

- "Trends in Aircraft Design Affecting the Airport," Ralph T. Glasson, Jr., and Weldon E. Rhoades (with discussion), (Aug AT2:73:2890)

AIR SANITATION

- "Determining Airport Needs for the Future," George DeMent (with discussion), (Aug AT2:15:2890)

AIR TRANSPORT

- "Aircraft Runway Arresting Barriers," Apostolos H. Zonars (with discussion), (Aug AT2:121:2897)

- "Airplane Performance and the Small Airport," Walter E. Gillfillan (Mar AT1:1:2758)

- "Airport Design by Economic Analysis," Paul H. Stafford and Martin A. Warskow (with discussion), (Aug AT2:29:2892)

- "Determining Airport Needs for the Future," George DeMent (with discussion), (Aug AT2:15:2890)

- "Importance of Regional Airport System Planning," Ray O. Kusche (with discussion), (Aug AT2:21:2891)

- "Location and Number of Exit Taxicabs," Robert Horonjeff (with discussion), (Aug AT2:99:2896)

- "Need for More Air Terminal Gates," Thomas M. Sullivan (Aug AT2:179:2900)

AIRPORT TRANSPORT Continued

"New Developments in Terminal Air Traffic Control," Walter N. Pike (with discussion), (Aug AT2:55:2893)

"Parking and Circulation of Vehicular Traffic at Airports," Israel Gilboa (Aug AT2:187:2901)

"Recent Developments in Airport Lighting," D. M. Finch (with discussion), (Aug AT2:133:2898)

"Runway Roughness Studies in the Aeronautical Field," John C. Houbolt (Mar AT1:11:2774)

"Summary of Prestressed Concrete Pavement Practices," F. M. Mellinger (Aug AT2:163:2899)

"Summary of Symposium on Supersonic Air Transport," Reginald J. Sutherland (with discussion), (Aug AT2:89:2895)

"Trends in Aircraft Design Affecting the Airport," Ralph T. Glasson, Jr., and Weldon E. Rhoades (with discussion), (Aug AT2:73:2894)

ALGAE

"Dissolved Solids Removal from Waste Water by Algae," Albert F. Bush, John D. Isherwood, and Shiva Rodgi (May SA3:39:2824)

"Filtration Using Radioactive Algae," Kenneth J. Ives (May SA3:23:2820)

ALUMINUM

"Experimental and Analytical Study of a Folded Plate," A. C. Scordelis, E. L. Croy, and I. R. Stubbs (Dec ST8:139:3023)

"Prestressed Bowstring Arch," Movses J. Kaldjian (Oct ST7:1:2953)

AMERICAN SOCIETY OF CIVIL ENGINEERS (General)

"Conference Remarks: Report of the AOC-ASCE Joint (May 1961) Conference Committee," Robert Horonjeff; George DeMent; Jerome Lederer (Aug AT2:1:2889)

"Research and the Professional Society," Arthur T. Ippen (Oct PP2:35:2952)

"Surveying and Mapping Division 1926-1960," Report of the Chairman, Executive Committee, Earle J. Fennell, Chrm (July SU2:29:2859)

ANALOGS

"Conjugate Beam Simulated by Electric Circuits," S. Freiberg (Aug EM4:91:2909)

"Electric Analog Computers for Laminar Flow Problems," Donald F. Young (Dec EM6:17:3013)

"Non-Linear Tidal Flows and Electric Analogs," James A. Harder and Frank D. Masch, Jr. (Nov WW4:27:2988)

ARCHES

"Deflection Theory of Arches," S. O. Asplund (Oct ST7:125:2963)

"Lateral Inelastic Buckling of Tied Arches," Chin Fung Kee (Jan ST1:23:2704)

"Prestressed Bowstring Arch," Movses J. Kaldjian (Oct ST7:1:2953)

ATOMIC BLAST

"Attenuation of Stress Waves in Bilinear Materials," Richard Skalak and Paul Weidlinger (June EM3:1:2829)

"Effect of Structure and Foundation Interaction," Daniel L. Lycan and Nathan M. Newmark (Oct EM5:1:2960)

"Elastic Rayleigh Wave Effects Due to Nuclear Blasts," Melvin L. Baron and Charles Lecht (Oct EM5:33:2961)

ATOMIC ENERGY

"Nuclear Energy for the Arctic," William F. Reilly and John T. Rhett, Jr. (Mar CO1:63:2784)

"Radiological Curricula for Sanitary Engineers," John E. Kiker, Jr. and F. Wellington Gilcreas (Mar SA2:1:2767)

AUTOMOBILE PARKING

"Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)

BACKWATER

"Water Surface Profiles in Irregular Natural Streams," Praxitelis A. Argyropoulos (July HY4:1:2849)

BEAMS, CONTINUOUS

"Bending of Beams Resting on Isotropic Elastic Solid," Aleksandar B. Vesic (Apr EM2:35:2800)

"Continuous Beam-Columns on Elastic Foundation," S. L. Lee, T. M. Wang, and J. S. Kao (Apr EM2:55:2801)

"Grid Analysis by the Reaction Distribution Method," Irving Fader (Aug ST6:77:2879)

BEAMS (General)

"Conjugate Beam Simulated by Electric Circuits," S. Freiberg (Aug EM4:91:2909)

"Elastomeric Pads as Bearings for Steel Beams," Hardy E. Fairbanks (Dec ST8:73:3021)

"Equations for Plate-Beam Systems in Transverse Bending," Alfredo H.-S. Ang and Wallace Prescott (Dec EM6:1:3009)

BEAMS (General) Continued

- "Further Studies of the Strength of Beam-Columns," Robert L. Ketter (Aug ST6:135:2879)
- "Post-Elastic Behavior of Wide-Flange Steel Beams," Herbert A. Sawyer, Jr. (Dec ST8:43:3016)
- "Strength and Design of Metal Beam-Columns," Walter J. Austin (Apr ST4:1:2802)
- "Tests of Composite Beams with Stud Shear Connectors," Charles Culver and Robert Coston (Feb ST2:1:2742)

BEARING CAPACITY

- "Displacement of Long Footings by Dynamic Loads," William L. Wallace (Oct SM5:45:2965)
- "Elastomeric Pads as Bearings for Steel Beams," Hardy E. Fairbanks (Dec ST8:73:3021)
- "Simplified Design of Combined Footings," Fritz Kramrisch and Paul Rogers (Oct SM5:19:2959)
- "Slope Stability Analysis by a New Graphical Method," M. Arnold (Oct SM5:1:2954)

BREAKWATERS

- "Pneumatic Breakwaters to Protect Dredges," James L. Green (May WW2:67:2815)

BRIDGES (General)

- "Dynamic Response of Highway Bridges," John F. Fleming and James P. Romualdi (Oct ST7:31:2955)
- "Elastomeric Pads as Bearings for Steel Beams," Hardy E. Fairbanks (Dec ST8:73:3021)
- "Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division, Milton O. Schmidt, Chrm (July SU2:9:2853)
- "Recent Advances in the Design and Behavior of Concrete Bridges," Hubert Rüschi (Oct ST7:199:2969)

BRIDGES, SUSPENSION

- "Torsional Behavior of Suspension Bridge Towers," Frank Baron and Anthony G. Arioto (Aug ST6:1:2879)

BRIDGES, TRUSS

- "Minimum-Weight Design of Beams for Deflection," Ralph L. Barnett (Feb EM1:75:2741)

BUCKLING

- "Buckling Behavior Above the Tangent Modulus Load," Bruce G. Johnston (Dec EM6:79:3019)
- "Lateral Inelastic Buckling of Tied Arches," Chin Fung Lee (Jan ST1:23:2704)
- "Postbuckling Behavior of Flat Plates," J. R. Jombock and J. W. Clark (June ST5:17:2844)
- "Stability of Frames in the Presence of Primary Bending Moments," E. F. Masur, I. C. Chang, and L. H. Donnell (Aug EM4:19:2882)
- "Strength of Plate Girders in Bending," Konrad Basler and Bruno Thurlimann (Aug ST6:153:2879)
- "Strength of Plate Girders in Shear," Konrad Basler (Oct ST7:151:2967)
- "Strength of Plate Girders Under Combined Bending and Shear," Konrad Basler (Oct ST7:181:2968)

BUILDINGS

- "Response of Multi-Story Structures to Earthquakes," Glen V. Berg (Apr EM2:1:2790)
- "Stresses at a Re-Entrant Corner of a Plate," Mario G. Salvadori (Oct ST7:91:2956)
- "Symposium on Grouting: Grouting at Fort Campbell Theatre Building," Bruce E. Clark (Apr SM2:33:2792)
- "Vibration of Shear Buildings by Flexibility Method," Ming L. Pei (Feb EM1:13:2728)

BULKHEADS

- "Field Study of a Cellular Bulkhead," Ardis White, James A. Cheney, and C. Martin Duke (Aug SM4:89:2902)

CAISSONS

- "Marine Foundation Construction in Oil Fields," S. J. Mathis (Mar CO1:17:2768)

CANALS (Geographical)

- Russia
 - "Great Volga Waterway," Otakar W. Kabelac (Feb WW1:151:2749)
- Panama Canal
 - "Non-Linear Tidal Flows and Electric Analogs," James A. Harder and Frank D. Masch, Jr. (Nov WW4:27:2988)

CAVITATION

- "Prediction of Cavitation Damage," N. S. Govinda Rao and A. Thiruvengadam (Sept HY5:37:2925)

CEMENT

- "Further Studies of the Strength of Beam-Columns," Robert L. Ketter (Aug ST6:135:2879)
- "Symposium on Grouting: Investigation of Sand-Cement Grouts," James M. Polatty (Apr SM2:83:2795)
- "Symposium on Grouting: Research in Foundation Grouting with Cement," Thomas B. Kennedy (Apr SM2:55:2794)

CHANNELS

- "Columbia River Ship Channel Improvement and Maintenance," Robert E. Hickson (Aug WW3:71:2883)
- "Dual Channel Stream Monitor," Susumu S. Karaki, Earl E. Gray, and Jack Collins (Nov HY6:1:2976)
- "End Depth at a Drop in Trapezoidal Channels," M. H. Diskin (July HY4:11:2851)
- "Forms of Bed Roughness in Alluvial Channels," D. B. Simons and E. V. Richardson (May HY3:87:2816)
- "General Solution for Open Channel Profiles," James A. Liggett (Nov HY6:89:2983)
- "Intercepting Drainage Wells in Artesian Aquifer," Dean F. Peterson (Mar IRI:7:2761)
- "Roughness Spacing in Rigid Open Channels," William W. Sayre and Maurice L. Albertson (May HY3:121:2823)
- "Stability of Alluvial Channels," Francis M. Henderson (Nov HY6:109:2984)
- "Stabilization of the Middle Rio Grande in New Mexico," Robert C. Woodson (Nov WW4:1:2980)
- "Study of Scour Around Spur-Dikes," R. J. Garde, K. Subramanya, and K. D. Nambudripad (Nov HY6:23:2978)
- "Water Surface Profiles in Irregular Natural Streams," Praxitelis A. Argyropoulos (July HY4:1:2849)

CITY PLANNING

- "Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)

CLAY

- "Cohesion After Non-Hydrostatic Consolidation," John H. Schmertmann and John R. Hall, Jr. (Aug SM4:39:2881)
- "Secondary Compression of Clays," K. Y. Lo (Aug SM4:61:2885)

COLUMNS

- "Buckling Behavior Above the Tangent Modulus Load," Bruce G. Johnston (Dec EM6:79:3019)

"Continuous Beam-Columns on Elastic Foundation," S. L. Lee, T. M. Wang, and J. S. Kao (Apr EM2:55:2801)

"Further Studies of the Strength of Beam-Columns," Robert L. Ketter (Aug ST6:135:2879)

"Impact Waves on Sand: Theory Compared with Experiments on Sand Columns," Blaine R. Parkin (June SM3:1:2828)

"Strength and Design of Metal Beam-Columns," Walter J. Austin (Apr ST4:1:2802)

COMPOSITING

"Refuse-Sludge Compositing in Windrows and Bins," John S. Wiley and Janet T. Spillane (Sept SA5:33:2941)

"Research on Compositing of City Refuse and Nitritol," Yonosuke Kaibuchi (Nov SA6:101:3002)

COMPUTATION AND COMPUTERS

"Blending Natural Earth Deposits for Least Cost," J. B. Ritter and L. R. Shaffer (Mar CO1:39:2773)

"Calculation of Potential Flows with Free Streamlines," Garrett Birkhoff (Nov HY6:17:2977)

"Continuous Parabolic Interpolation," Willard M. Snyder (July HY4:99:2865)

"Earthwork Computations on Electronic Computers," Robert J. Hansen, S. Roy Cason, and Paul Yeager (Mar HW1:21:2789)

"Electric Analog Computers for Laminar Flow Problems," Donald F. Young (Dec EM6:17:3013)

"Electronic Computer Use in Scoping Power Projects," Parker R. Grimes and Glenn H. Von Gunten (Jan PO1:1:2709)

"Filtration Using Radioactive Algae," Kenneth J. Ives (May SA3:23:2820)

"General Solution for Open Channel Profiles," James A. Liggett (Nov HY6:89:2983)

"New Developments in Terminal Air Traffic Control," Walter N. Pike (with discussion), (Aug AT2:55:2890)

"Response of Multi-Story Structures to Earthquake," Glenn V. Berg (Apr EM2:1:2790)

"Use of Computers for Kansas River Flood Studies," William L. Northrop and Clarence W. Timberman (July HY4:113:2866)

"Variational Methods in Fluid Dynamics," J. W. Delleur and A. A. Sooky (Dec EM6:57:3018)

CONCRETE (General)

"Aggregates and Fly-Ash Concrete for Barley Lock," Louis Campbell, Jr. (Mar CO1:1:2759)

CONCRETE (General) Continued

"Effects of Hydrogen Sulfide on Concrete Structures," Bernal H. Swab (Sept SA5:1:2921)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

"Restraint of Structures Attached to Mass Concrete," Keith Jones (Dec ST8:25:3014)

CONCRETE, PRESTRESSED

"Elastomeric Pads as Bearings for Steel Beams," Hardy E. Fairbanks (Dec ST8:73:3021)

"Prestressed Bowstring Arch," Moves J. Kaldjian (Oct ST7:1:2953)

"Recent Advances in the Design and Behavior of Concrete Bridges," Hubert Rüschi (Oct ST7:199:2969)

"Summary of Prestressed Concrete Pavement Practices," F. M. Mellinger (Aug AT2:163:2897)

CONCRETE, REINFORCED

"Multiple Ribless Shells," Anton Tedesko (Oct ST7:107:2962)

"Recent Trends in Ultimate Strength Design," Phil M. Ferguson (Jan ST1:57:2715)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

CONSTRUCTION

"Aggregates and Fly-Ash Concrete for Barley Lock," Louis Campbell, Jr. (Mar CO1:1:2759)

"Blending Natural Earth Deposits for Least Cost," J. B. Ritter and L. R. Shaffer (Mar CO1:39:2773)

"Design and Stability Considerations for Unique Pier," James Michalos and David P. Billington (May WW2:1:2807)

"Highway and Bridge Surveys: Construction Surveys: Part I Triangulation: Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division," Milton O. Schmidt, Chrm (Jan SU1:13:2705)

"Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division, Milton O. Schmidt, Chrm (July SU2:9:2853)

"Marine Foundation Construction in Oil Fields," S. J. Mathis (Mar CO1:17:2768)

"Marine Oil Terminal for Rio de Janeiro, Brazil," H. W. Reeves (Feb WW1:47:2733)

"Navy's New Carrier Berthing Facilities at San Diego," D. R. Forrest and John B. Stetson (Nov WW4:69:2994)

"Nuclear Power for the Arctic," William F. Reilly and John T. Rhett, Jr. (Mar CO1:63:2784)

"Penstocks and Scroll Cases for Niagara Power Project," J. Edgar Revelle and John N. Pirok (Nov PO3:1:2979)

"Pipeline Location: Duties of the Engineer on Construction: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:17:2739)

"Recent Advances in the Design and Behavior of Concrete Bridges," Hubert Rüschi (Oct ST7:199:2969)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

"Symposium on Grouting: Construction of Rocky Reach Grouted Cutoff," W. F. Swiger (Apr SM2:95:2796)

CONTRACTS

"Pipeline Location: Engineering Service Agreement: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:9:2738)

CORROSION

"Corrosion of Steel Piles in Salt Water," James R. Ayers and Ralph C. Stokes (Aug WW3:95:2886)

"Effects of Hydrogen Sulfide on Concrete Structures," Bernal H. Swab (Sept SA5:1:2921)

"Fundamentals of Cathodic Protection," Jack W. Pierce (Sept PL2:35:2939)

"Steel Pile Marine Corrosion and Cathodic Protection," Carter Hale Horton (Aug WW3:59:2877)

COSTS

"Columbia River Ship Channel Improvement and Maintenance," Robert E. Hickson (Aug WW3:71:2883)

COSTS, AIRPORT

"Airport Design by Economic Analysis," Paul H. Stafford and Martin A. Warskow (with discussion), (Aug AT2:29:2890)

COSTS, BREAKWATER

- "Groins on the Shores of the Great Lakes," Charles E. Lee (May WW2: 89:2819)

COSTS, CONSTRUCTION

- "Blending Natural Earth Deposits for Least Cost," J. B. Ritter and L. R. Shaffer (Mar CO1:39:2773)

COSTS, POWER

- "Current Developments in Hydro-Electric Plant Design," William H. Wolf (Nov PO3:55:2995)
- "Studies for the Lower Monumental Power Plant," Benjamin F. Smith (July PO2:1:2847)

COSTS, WATER

- "Cost Allocation of Water Projects in California," Amalio Gomez (Mar HY2: 7:2760)
- "Outlook for Economic Use of Fresh Water from the Sea," Samuel B. Morris (June IR2:15:2834)

CURVES

- "Earthwork Computations on Electronic Computers," Robert J. Hansen, S. Roy Cason, and Paul Yeager (Mar HW1:21:2789)
- "Frequency of Natural Events," H. C. Riggs (Jan HY1:15:2706)
- "Hydraulic Computation from Limited Information," Cecil K. Oakes (Jan HY1:85:2711)

DAMS, ARCH

- "Private Power Development of an Entire River," Richard S. Woodruff (July PO2:69:2857)

DAMS, EARTH

- "Oroville Dam and Appurtenant Features," W. G. Shulz, D. P. Thayer, and J. J. Doody (July PO2:29:2852)
- "Uncertainties in Earth Dam Design," John M. Bird (June SM3:33:2832)

DAMS (General)

- "Cost Allocation of Water Projects in California," Amalio Gomez (Mar HY2: 7:2760)
- "Dead-Load Stress in Model Dams by Method of Integration," Jerome M. Raphael (Aug ST6:31:2903)
- "Friant-San Joaquin River Litigation," Charles H. Lee (Dec IR4:27: 3007)
- "Hydraulic Design of Hollow-Jet Valve Stilling Basins," Glen L. Beichley and Alvin J. Peterka (Sept HY5:1: 2924)

- "Influence of Geological Conditions on Uplift," W. Harold Stuart (Dec SM6:1: 3008)

"Power from the Sea," El Sayed Mohamed Hassan (July PO2:21:2850)

- "Restraint of Structures Attached to Mass Concrete," Keith Jones (Dec ST8: 25:3014)

"Stress Analysis and Special Problems of Prestressed Dams," O. C. Zienkiewicz and R. W. Gerstner (Jan PO1:7: 2714)

- "Total Sediment Transport in the Lower Colorado River," John R. Sheppard (Nov HY6:139:2990)

DAMS, MASONRY AND CONCRETE

- "Current Developments in Hydro-Electric Plant Design," William H. Wolf (Nov PO3:55:2995)
- "Fish Handling Facilities for Baker River Project," Warner W. Wayne, Jr. (Nov PO3:23:2993)
- "Glen Canyon Powerplant," Samuel Judd (July PO2:41:2855)
- "Stilling Basin Damage at Chief Joseph Dam," Robert H. Gedney (Mar HY2:97: 2777)

DAMS, ROCKFILL (Geographical)
California

- "Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

DAMS, ROCKFILL (Name)
Courtright

- "Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)
- "Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

DRAINAGE

- "Design of Interceptor Drains in Heterogeneous Soils," R. William Nelson (Dec IR4:41:3011)
- "Effect of Filtering on Model Recharge Wells," Leonard Schiff (Dec IR4:55: 3015)
- "Factors Affecting the Safe Yield of Ground-Water Basins," John F. Mann, Jr. (Sept IR3:63:2948)
- "Field Measurement of Hydraulic Conductivity," William W. Donnan and V. S. Aronovici (June IR2:1:2831)
- "Friant-San Joaquin River Litigation," Charles H. Lee (Dec IR4:27:3007)
- "Intercepting Drainage Wells in Artesian Aquifer," Dean F. Peterson (Mar IR1:7:2761)

DRAINAGE Continued

"Irrigation and Drainage Studies of Texas Rivers," Rolland F. Kaser (Sept IR3:13:2928)

"Soil Drainability Factor in Land Classification," Claude L. Fly (Sept IR3:47:2946)

"Tolerance of Plants to Salinity," Leon Bernstein (Dec IR4:1:3005)

"Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)

"Unsteady Flow of Ground Water into Drain Tile," R. H. Brooks (June IR2:27:2836)

DREDGES AND DREDGING

"Latest Dredging Practice," Ole P. Erickson

"Navy's New Carrier Berthing Facilities at San Diego," D. R. Forrest and John B. Stetson (Nov WW4:69:2994)

"Pneumatic Breakwaters to Protect Dredges," James L. Green (May WW2:67:2815)

"Small-Boat Development on the Pacific Coast," Reuben J. Johnson (Feb WW1:1:2726)

EARTHQUAKES

"Effect of Structure and Foundation Interaction," Daniel L. Lycan and Nathan M. Newmark (Oct EM5:1:2960)

"Response of Multi-Story Structures to Earthquakes," Glen V. Berg (Apr EM2:1:2790)

EARTHWORK

"Blending Natural Earth Deposits for Least Cost," J. B. Ritter and L. R. Shaffer (Mar CO1:39:2773)

"Earthwork Computations on Electronic Computers," Robert J. Hansen, S. Roy Cason, and Paul Yeager (Mar HW1:21:2789)

ECONOMICS

"Airport Design by Economic Analysis," Paul H. Stafford and Martin A. Warskow (with discussion), (Aug AT2:29:2890)

"Cost Allocation of Water Projects in California," Amalio Gomez (Mar HY1:7:2760)

"Economic Evaluation of Inland Waterway Projects," Shu-t'ien Li and Eric E. Bottoms (Aug WW3:29:2876)

"Economics of River Bank Stabilization," Charles Senour (May WW2:17:2809)

"Economy of High Strength Steel Structural Members," Geerhard Haaijer (Dec ST8:1:3010)

"Outlook for Economic Use of Fresh Water from the Sea," Samuel B. Morris (June. IR2:15:2834)

"Relationship of Compression Ratio to Gas Pipelines," Raymond R. Crawford (Sept PL2:11:2932)

"Studies for the Lower Monumental Power Plant," Benjamin F. Smith (July PO2:1:2847)

EDUCATION

"Radiological Curricula for Sanitary Engineers," John E. Kiker, Jr. and F. Wellington Gilcreas (Mar SA2:1:2767)

"Research and Civil Engineering Education," Nathan M. Newmark (Oct PP2:1:2950)

"Sanitary Engineering Comes of Age," P. H. McGauhey (May SA3:1:2806)

"Sanitary Engineering Education in a Changing World," Daniel A. Okun (July SA4:47:2862)

ELASTICITY

"Elastic Rayleigh Wave Effects Due to Nuclear Blasts," Melvin L. Baron and Charles Lecht (Oct EM5:33:2961)

ENGINEERING MECHANICS

"Analysis of Frames Loaded into the Plastic Range," Morris Ojalvo and Le-Wu Lu (Aug EM4:35:2884)

"Analysis of Noncoplanar Elastic Rings," D. H. Pletta, W. C. Liessner, and Yen-Ming Yeh (Aug EM4:49:2887)

"Attenuation of Stress Waves in Bilinear Materials," Richard Skalak and Paul Weidlinger (June EM3:1:2829)

"Bending and Stretching of Laminated Aeolotropic Plates," Yehuda Stavsky (Dec EM6:31:3017)

"Bending of Beams Resting on Isotropic Elastic Solid," Aleksandar B. Vesić (Apr EM2:35:2800)

"Brittle Fractures Explained by Negative Residuals," L. E. Grinter (Apr EM2:25:2799)

"Buckling Behavior Above the Tangent Modulus Load," Bruce G. Johnston (Dec EM6:79:3019)

"Conjugate Beam Simulated by Electric Circuits," S. Freiberg (Aug EM4:91:2909)

"Continuous Beam-Columns on Elastic Foundation," S. L. Lee, T. M. Wang, and J. S. Kao (Apr EM2:55:2801)

"Dynamic Elastic-Plastic Analysis of Structures," Melvin L. Baron, Hans H. Bleich, and Paul Weidlinger (Feb EM1:23:2731)

"Effect of Joint Rotation on Dynamics of Structures," Moshe F. Rubinstein and Walter C. Hurty (Dec EM6:135:3028)

"Effect of Structure and Foundation Interaction," Daniel L. Lycan and Nathan M. Newmark (Oct EM5:1:2960)

ENGINEERING MECHANICS Continued

"Elastic Rayleigh Wave Effects Due to Nuclear Blasts," Melvin L. Baron and Charles Lecht (Oct EM5:33:2961)

"Electric Analog Computers for Laminar Flow Problems," Donald F. Young (Dec EM6:17:3013)

"Equations for Plate-Beam Systems in Transverse Bending," Alfredo H.-S. Ang and Wallace Prescott (Dec EM6:1:3009)

"Hydrodynamics of Flow into Curb-Opening Inlets," Richard J. Wasley (Aug EM4:1:2880)

"Interfacial Mixing in Stratified Flow," Enzo Oscar Macagno and Hunter Rouse (Oct EM5:55:2964)

"Method of Internal Constraints and Its Application," Enrico Volterra (Aug EM4:103:2911)

"Minimum-Weight Design of Beams for Deflections," Ralph L. Barnett (Feb EM1:75:2741)

"Moire Fringes as a Means of Analyzing Strains," C. A. Sciammerella and A. J. Durelli (Feb EM1:55:2736)

"Range of Yield Conditions in Ideal Plasticity," R. M. Haythornthwaite (Dec EM6:117:3027)

"Response of Multi-Story Structures to Earthquake," Glen V. Berg (Apr EM2:1:2790)

"Spherical Waves in a Plastic Locking Medium," Mario G. Salvadori, Richard Skalak, and Paul Weidlinger (Feb EM1:1:2727)

"Stability in a Continuously Stratified Fluid," Philip G. Drazin and Louis N. Howard (Dec EM6:101:3026)

"Stability of Frames in the Presence of Primary Bending Moments," E. F. Masur, I. C. Chang, and L. H. Donnell (Aug EM4:19:2882)

"Stress Analysis of Translational Shells," Kristoffer Apeland (Feb EM1:111:2743)

"Stresses at a Re-Entrant Corner of a Plate," Mario G. Salvadori (Oct ST7:91:2956)

"Two-Dimensional Flow with Corner Eddies," Aris C. Spengos (Apr EM2:17:2798)

"Ultrasonic Evaluation of Reinforced Plastics," Albert G. H. Dietz (June EM3:31:2835)

"Uniformly Moving Load on a Layered Half Plane," J. L. Sackman (Aug EM4:75:2907)

"Variational Methods in Fluid Dynamics," J. W. Delleur and A. A. Sooky (Dec EM6:57:3018)

"Vibration of Shear Buildings by Flexibility Method," Ming L. Pei (Feb EM1:13:2728)

"Viscoelastic Plate on a Viscoelastic Foundation," Karl S. Pister (Feb EM1:43:2735)

"Viscoelastic Winkler Foundation with Shear Interaction," Arnold D. Kerr (June EM3:13:2830)

"Wind-Induced Vibrations in Antenna Members," William Weaver, Jr. (Feb EM1:141:2748)

ENGINEERS AND ENGINEERING

"Meaning of the Professional License to Engineers," Donald Kowtko (Jan PP1:9:2699)

"Philosophical Aspects of Structural Design," Hsuan Loh Su (June ST5:1:2843)

"Pipeline Location: Duties of the Engineer on Construction: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:17:2739)

"Sanitary Engineering Comes of Age," P. H. McGauhey (May SA3:1:2806)

"Sanitary Engineering Education in a Changing World," Daniel A. Okun (July SA4:47:2862)

"Status of State Registration Laws," William N. Spann (Jan PP1:1:2698)

"Surveying and Mapping Division 1926-1960," Report of the Chairman, Executive Committee, Earl J. Fennell, Chrm (July SU2:29:2859)

"The Civil Engineer and Urban Transportation," Jack B. Blackburn (Sept HW3:1:2937)

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"Groins on the Shores of the Great Lakes," Charles E. Lee (May WW2:89:2819)

"Stilling Basin Damage at Chief Joseph Dam," Robert H. Gedney (Mar HY2:97:2777)

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"Brittle Fractures Explained by Negative Residuals," L. E. Grinter (Apr EM2:25:2799)

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"Adhesion in Filters," Vladimir Mackrle and Svatopluk Mackrle (Sept SA5:17:2940)

"Effect of Filtering on Model Recharge Wells," Leonard Schiff (Dec IR4:55:3015)

FILTERS AND FILTRATION Continued

- "Filtration Using Radioactive Algae," Kenneth J. Ives (May SA3:23:2820)
- "Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)
- "Trickling Filtration Design and Performance," Wesley Eckenfelder, Jr. (July SA4:33:2860)

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- "Hydrodynamics of Flow into Curb-Opening Inlets," Richard J. Wasley (Aug EM4:1:2880)

FLOODS (Geographical)

- Kansas River
 - "Use of Computers for Kansas River Flood Studies," William L. Northrop and Clarence W. Timberman (July HY4:113:2866)

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- "Forms of Bed Roughness in Alluvial Channels," D. B. Simons and E. V. Richardson (May HY3:87:2816)
- "Study of Scour Around Spur-Dikes," R. J. Garde, K. Subramanya, and K. D. Nambudripad (Nov HY6:23:2978)
- "Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)

FOUNDATIONS, DAM

- "Stress Analysis and Special Problems of Prestressed Dams," O. C. Zienkiewicz and R. W. Gerstner (Jan PO1:7:2714)

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- "Bending of Beams Resting on Isotropic Elastic Solid," Aleksandar B. Vesic (Apr EM2:35:2800)
- "Continuous Beam-Columns on Elastic Foundation," S. L. Lee, T. M. Wang, and J. S. Kao (Apr EM2:55:2801)
- "Displacement of Long Footings by Dynamic Loads," William L. Wallace (Oct SM5:45:2965)
- "Effect of Structure and Foundation Interaction," Daniel L. Lycan and Nathan M. Newmark (Oct EM5:1:2960)
- "Field Study of a Cellular Bulkhead," Ardis White, James A. Cheney, and C. Martin Duke (Aug SM4:89:2902)
- "Foundation Stability for a Submarine Liquid Sulphur Pipeline," Basil W. Wilson (Aug SM4:1:2878)
- "Geophysics Efficient in Exploring the Subsurface," R. Woodward Moore (June SM3:69:2838)

- "Impact Waves in Sand: Implications of an Elementary Theory," Blaine R. Parkin (Aug SM4:147:2912)

- "Impact Waves in Sand: Theory Compared with Experiments on Sand Columns," Blaine R. Parkin (June SM3:1:2828)

- "Influence of Geological Conditions on Uplift," W. Harold Stuart (Dec SM6:1:3008)

- "Marine Foundation Construction in Oil Fields," S. J. Mathis (Mar CO1:17:2768)

- "Multiple Soil Sampler," P. J. Parsons (Dec SM6:19:3012)

- "Pile Heave and Redriving," Earle J. Kohn (Aug SM4:125:2905)

- "Seepage Through Layered Anisotropic Porous Media," David K. Todd and Jacob Bear (May HY3:31:2810)

- "Simplified Design of Combined Footings," Fritz Kramrisch and Paul Rogers (Oct SM5:19:2959)

- "Slope Stability Analysis by a New Graphical Method," M. Arnold (Oct SM5:1:2954)

- "Static and Dynamic Behavior of Small Footings," E. T. Selig and K. E. McKee (Dec SM6:29:3020)

- "Symposium on Grouting: Construction of Rocky Reach Grouted Cutoff," W. F. Swiger (Apr SM2:95:2796)

- "Symposium on Grouting: Grouting at Fort Campbell Theatre Building," Bruce E. Clark (Apr SM2:33:2792)

- "Symposium on Grouting: Grouting in Flowing Water and Stratified Deposits," R. H. Karol and A. M. Swift (Apr SM2:125:2797)

- "Symposium on Grouting: Grouting of Granular Materials," John C. King and Edward G. W. Bush (Apr SM2:1:2791)

- "Symposium on Grouting: Grouting to Prevent Vibration of Machinery," John P. Gnaedinger (Apr SM2:43:2793)

- "Symposium on Grouting: Investigation of Sand-Cement Grouts," James M. Polatty (Apr SM2:83:2795)

- "Symposium on Grouting: Research in Foundation Grouting with Cement," Thomas B. Kennedy (Apr SM2:55:2794)

- "Tank Foundations in Eastern Venezuela," Emery D. Carlson and Stephen P. Fricano (Oct SM5:69:2966)

- "Timber Piles in Permafrost at Alaskan Radar Station," Willard C. Jensen (Feb SM1:15:2734)

- "Uncertainties in Earth Dam Design," John M. Bird (June SM3:33:2832)

- "Underpinning of a Wind Tunnel," James F. McNulty and James S. O'Brien (Feb SM1:1:2732)

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"Viscoelastic Plate on a Viscoelastic Foundation," Karl S. Pister (Feb EM1: 43:2735)

"Viscoelastic Winkler Foundation with Shear Interaction," Arnold D. Kerr (June EM3:13:2830)

FRAMES

"Analysis of Frames Loaded into the Plastic Range," Morris Ojalvo and Le-Wu Lu (Aug EM4:35:2884)

"General Solution of Space Frameworks," Ignacio Martin and Jose E. Hernandez (Aug ST6:47:2879)

"Stability of Frames in the Presence of Primary Bending Moments," E. F. Masur, I. C. Chang, and L. H. Donnell (Aug EM4:19:2882)

"Steel Frame Folded Plate Roof," Oliver A. Baer (June ST5:35:2845)

"String Polygon Analysis of Frames with Straight Members," Jan T. Tuma and John T. Oden (Oct ST7:63:2956)

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"Water Balance Recorder," Hans C. Aslyn and Knud J. Kristensen (Mar IR1:15:2762)

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"Dual Channel Stream Monitor," Susumu S. Karaki, Earl E. Gray, and Jack Collins (Nov HY6:1:2976)

"Stream-Gaging Network in the United States," John E. McCall (Mar HY2:79: 2776)

GEOLOGY

"Friant-San Joaquin River Litigation," Charles H. Lee (Dec IR4:27:3007)

"Geophysics Efficient in Exploring the Subsurface," R. Woodward Moore (June SM3:69:2838)

"Hydrogeologic Nature of Streamflow on Small Watersheds," J. L. McGuinness, L. L. Harrold and C. R. Amerman (Jan HY1:1:2700)

"Influence of Geological Conditions on Uplift," W. Harold Stuart (Dec SM6:1: 3008)

"Underground Power Plants in Yugoslavia," V. M. Yevdjevich (Nov PO3: 81:2998)

GIRDERS

"Moments at Selected Points in Continuous Girders," George H. Dell (Dec ST8:193:3025)

"Strength of Plate Girders in Bending," Konrad Basler and Bruno Thurlimann (Aug ST6:153:2879)

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"Analysis of Seepage Problems," Milton E. Harr and Robert C. Deen (Oct SM5:91:2971)

"Theoretical and Practical Aspects of Well Recharge," Paul Baumann (Nov HY6:155:2992)

"Unsteady Flow of Ground Water into Drain Tile," R. H. Brooks (June IR2: 27:2836)

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"Symposium on Grouting: Construction of Rocky Reach Grouted Cutoff," W. F. Swiger (Apr SM2:95:2796)

"Symposium on Grouting: Grouting at Fort Campbell Theatre Building," Bruce E. Clark (Apr SM2:33:2792)

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"Symposium on Grouting: Grouting of Granular Materials," John C. King and Edward G. W. Bush (Apr SM2:1:2791)

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"Symposium on Grouting: Research in Foundation Grouting with Cement," Thomas B. Kennedy (Apr SM2:55:2794)

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"Steel Pile Marine Corrosion and Cathodic Protection," Carter Hale Horton (Aug WW3:59:2877)

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"Columbia River Ship Channel Improvement and Maintenance," Robert E. Hickson (Aug WW3:71:2883)

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"Behavior of Beach Fills in New England," Harry S. Perdakis (Feb WW1: 75:2744)

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- *Design of Fox Point Hurricane Barrier," Roy S. Martin (Feb WW1:125:2747)
- *Eddy Forces on Rigid Cylinders," Alan D. K. Laird (Nov WW4:53:2991)
- *Harbor Paradox," John Miles and Walter Munk (Aug WW3:111:2888)
- *Land and Water Resource Planning in Texas," Charles D. Curran and Forney W. Fleming (Nov WW4:41:2989)
- *Latest Dredging Practice," Ole P. Erickson (Feb WW1:15:2729)
- *Navy's New Carrier Berthing Facilities at San Diego," D. R. Forrest and John B. Stetson (Nov WW4:69:2994)
- *Non-Linear Tidal Flows and Electric Analogs," James A. Harder and Frank D. Masch, Jr. (Nov WW4:27:2988)
- *Pneumatic Breakwaters to Protect Dredges," James L. Green (May WW2:67:2815)
- *Small-Boat Development on the Pacific Coast," Reuben J. Johnson (Feb WW1:1:2726)
- *Synthetic Material Filters in Coastal Protection," Hans A. Agerschou (Feb WW1:111:2745)
- *Theory of Wave Agitation in a Harbor," Bernard Le Méhauté (Mar HY2:31:2765)

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- Brazil
 - *Marine Oil Terminal for Rio de Janeiro, Brazil," H. W. Reeves (Feb WW1:47:2733)
- Great Lakes
 - *Groins on the Shores of the Great Lakes," Charles E. Lee (May WW2:89:2819)
- Hudson River
 - *Shoaling of the Lower Hudson River," Charles M. Duke (Feb WW1:29:2730)
- New York
 - *Cathodic Protection of Marine Terminal Facilities," Joseph Milano (May WW2:27:2811)
 - *Design and Stability Considerations for Unique Pier," James Michalos and David P. Billington (May WW2:1:2807)

HIGHWAYS AND ROADS (General)

- *Dynamic Response of Highway Bridges," John F. Fleming and James P. Romualdi (Oct ST7:31:2955)
- *Earthwork Computations on Electronic Computers," Robert J. Hansen, S. Roy Cason, and Paul Yeager (Mar HW1:21:2789)

- *Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division," Milton O. Schmidt, Chrm (July SU2:9:2853)
- *Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)
- *Land Use and Expressways," Fred W. Tuemmler (Sep CP1:29:2938)
- *Prefabricated Reducers as Entrances for Pipe Culverts," H. G. Aronson (Mar HW1:1:2766)

HYDRAULIC JUMP

- *Stilling Basin Damage at Chief Joseph Dam," Robert H. Gedney (Mar HY2:97:2777)

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- *Aerated Flow in Open Channels: Progress Report, Task Committee on Air Entrainment in Open Channels, Committee on Hydromechanics, Hydraulics Division," Norman H. Brooks, Chrm (May HY3:73:2814)
- *Aqueduct Capacity Under an Optimum Benefit Policy," Warren A. Hall (Sept IR3:1:2923)
- *Calculation of Potential Flows with Free Streamlines," Garrett Birkhoff (Nov HY6:17:2977)
- *Continuous Parabolic Interpolation," Willard M. Snyder (July HY4:99:2865)
- *Cost Allocation of Water Projects in California," Amalio Gomez (Mar HY2:7:2760)
- *Cyclical Variations in World-Wide Hydrologic Data," Gordon R. Williams (Nov HY6:71:2982)
- *Design of Interceptor Drains in Heterogeneous Soils," R. William Nelson (Dec IR4:41:3011)
- *Development of a Variable Resistance Velocity Meter," Iury L. Maytin (Jan HY1:95:2713)
- *Drawdown Around a Partially Penetrating Well," Mahdi S. Hantush (July HY4:83:2864)
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- *Electric Analog Computers for Laminar Flow Problems," Donald F. Young (Dec EM6:17:3013)

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- "End Depth at a Drop in Trapezoidal Channels," M. H. Diskin (July HY4:11:2851)
- "Estimating Potential Evapotranspiration," W. Russell Hamon (May HY3:107:2817)
- "Estuarial Sediment Transport Patterns," H. A. Einstein and R. B. Krone (Mar HY2:51:2770)
- "Field Measurement of Hydraulic Conductivity," William W. Donnan and V. S. Aronovici (June IR2:1:2831)
- "Fish Passage Through Hydraulic Turbines," Glenn H. Von Gunten (May HY3:59:2812)
- "Forecasting River Runoff by Coastal Flow Index," David M. Rockwood and Carlton E. Jencks (Mar HY2:121:2780)
- "Forms of Bed Roughness in Alluvial Channels," D. B. Simons and E. V. Richardson (May HY3:87:2816)
- "Free Surface Flow in Homogeneous Porous Medium," Roger De Wiest (July HY4:181:2871)
- "Frequency of Natural Events," H. C. Riggs (Jan HY1:15:2706)
- "General Solution for Open Channel Profiles," James A. Liggett (Nov HY6:89:2983)
- "Hydraulic Computation from Limited Information," Cecil K. Oakes (Jan HY1:85:2711)
- "Hydraulics of Southwest Pass, Mississippi River," Chester A. Peyronnin, Jr. (Jan HY1:103:2716)
- "Hydrogeologic Nature of Streamflow on Small Watersheds," J. L. McGuinness, L. L. Harrold and C. R. Amerman (Jan HY1:1:2700)
- "Interfacial Mixing in Stratified Flow," Enzo Oscar Macagno and Hunter Rouse (Oct EM5:55:2964)
- "Jet Discharge into a Fluid with a Density Gradient," William E. Hart (Nov HY6:171:2996)
- "Manifold Stilling Basin," Gene R. Fiala and Maurice L. Albertson (July HY4:55:2863)
- "Mechanics of Washout of an Erodible Fuse Plug," E. Roy Tinney and H. Y. Hsu (May HY3:1:2808)
- "Needs in Sedimentation," H. A. Einstein (Mar HY2:1:2756)
- "Prefabricated Reducers as Entrances for Pipe Culverts," H. G. Aronson (Mar HW1:1:2766)
- "Prototype Measurements of the Columbia River Estuary," John B. Lockett and Harold L. Kidby (Jan HY1:57:2710)
- "Queuing Theory and Simulation in Reservoir Design," Myron B. Flering (Nov HY6:39:2981)
- "Roughness Spacing in Rigid Open Channels," William W. Sayre and Maurice L. Albertson (May HY3:1212:2823)
- "Seepage Through Layered Anisotropic Porous Media," David K. Todd and Jacob Bear (May HY3:31:2810)
- "Some Aspects of Surface Water Wave Scale Effects," Gerrit Abraham (Jan HY1:41:2708)
- "Some Legal Aspects of Sedimentation," C. E. Busby (July HY4:151:2867)
- "Stability in a Continuously Stratified Fluid," Philip G. Drazin and Louis N. Howard (Dec EM6:101:3026)
- "Stability of Alluvial Channels," Francis M. Henderson (Nov HY6:109:2984)
- "Stilling Basin Damage at Chief Joseph Dam," Robert H. Gedney (Mar HY2:97:2777)
- "Stream-Gaging Network in the United States," John E. McCall (Mar HY2:79:2776)
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- "Theoretical and Practical Aspects of Well Recharge," Paul Baumann (Nov HY6:155:2992)
- "Theory of Wave Agitation in a Harbor," Bernard Le Méhauté (Mar HY2:31:2765)
- "Total Sediment Transport in the Lower Colorado River," John R. Sheppard (Nov HY6:139:2990)
- "Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)
- "Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)
- "Unsteady Flow of Ground Water into Drain Tile," R. H. Brooks (June IR2:27:2836)
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- "Variational Methods in Fluid Dynamics," J. W. Delleur and A. A. Sooky (Dec EM6:57:3018)
- "Vector Aspects of Dynamic Similarity," R. C. Kolf and W. L. Reitmeyer (Mar HY2:19:2763)
- "Vibration Problems in Hydraulic Structures," Frank B. Campbell (Mar HY2:61:2772)

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"Water Surface Profiles in Irregular Natural Streams," Praxitelis A. Argyropoulos (July HY4:1:2849)

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"Adhesion in Filters," Vladimir Mackrle and Svatopluk Mackrle (Sept SA5:17:2940)

"Eddy Forces on Rigid Cylinders," Alan D. K. Laird (Nov WW4:53:2991)

"Hydrodynamics of Flow into Curb-Opening Inlets," Richard J. Wasley (Aug EM4:1:2880)

"Interfacial Mixing in Stratified Flow," Enzo Oscar Macagno and Hunter Rouse (Oct EM5:55:2964)

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"Two-Dimensional Flow with Corner Eddies," Aris C. Spengos (Apr EM2:17:2798)

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"Hydraulic Computation from Limited Information," Cecil K. Oakes (Jan HY1:85:2711)

"Hydrogeologic Nature of Streamflow on Small Watersheds," J. L. McGuinness, L. L. Harrold, and C. R. Amerman (Jan HY1:1:2700)

"Storm Water and Combined Sewage Overflows," Samuel A. Greeley and Paul E. Langdon (Jan SA1:57:2718)

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"Nuclear Power for the Arctic," William F. Reilly and John T. Rhett, Jr. (Mar CO1:63:2784)

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"Design and Stability Considerations for Unique Pier," James Michalos and David P. Billington (May WW2:1:2807)

"Operative Energy Concept in Marine Fendering," Shu-t'ien Li (Aug WW3:1:2875)

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"Aqueduct Capacity Under an Optimum Benefit Policy," Warren A. Hall (Sept IR3:1:2923)

"Consumptive Use and Water Waste by Phreatophytes," Harry F. Blaney (Sept IR3:37:2929)

"Design of Interceptor Drains in Heterogeneous Soils," R. William Nelson (Dec IR4:41:3011)

"Effect of Filtering on Model Recharge Wells," Leonard Schiff (Dec IR4:55:3015)

"Factors Affecting the Safe Yield of Ground-Water Basins," John F. Mann, Jr. (Sept IR3:63:2948)

"Field Measurement of Hydraulic Conductivity," William W. Donnan and V. S. Aronovici (June IR2:1:2831)

"Friant-San Joaquin River Litigation," Charles H. Lee (Dec IR4:27:3007)

"Irrigation and Drainage Studies of Texas Rivers," Rolland F. Kaser (Sept IR3:13:2928)

"Leaching Requirements in Irrigation," Raymond A. Hill (Mar IR1:1:2757)

"Outlook for Economic Use of Fresh Water from the Sea," Samuel B. Morris (June IR2:15:2834)

"Relation of Intake Rate to Length of Run in Surface Irrigation," A. Alvin Bishop (Mar IR1:23:2769)

"Tolerance of Plants to Salinity," Leon Bernstein (Dec IR4:1:3005)

"Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)

"Unsteady Flow of Ground Water into Drain Tile," R. H. Brooks (June IR2:27:2836)

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"Variable Head Technique for Seepage Meters," Herman Bouwer (Mar IR1:31:2775)

"Water Balance Recorder," Hans C. Aslyng and Knud J. Kristensen (Mar IR1:15:2762)

"Water Table Fluctuations Induced by Irrigation," Marinus Maasland (June IR2:39:2837)

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"Land and Water Resource Planning in Texas," Charles D. Curran and Forney W. Fleming (Nov WW4:41:2989)

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"Effect of Joint Rotation on Dynamics of Structures," Moshe F. Rubinstein and Walter C. Hurty (Dec EM6:135:3028)

LABORATORIES

"Effect of Water Temperature on Stream Reaeration: Thirty-first Progress Report, Committee on Sanitary Engineering Research," N. L. Nemerow, Chrm (Nov SA6:59:2997)

"Manifold Stilling Basin," Gene R. Fiala and Maurice L. Albertson (July HY4:55:2863)

LANDFILL, SANITARY

"Survey of Sanitary Landfill Practices: Thirtieth Progress Report," Committee on Sanitary Engineering Research, Sanitary Engineering Division, N. L. Nemerow, Chrm (July SA4:65:2874)

LAW

"Friant-San Joaquin River Litigation," Charles H. Lee (Dec IR4:27:3007)

"Some Legal Aspects of Sedimentation," C. E. Busby (July HY4:151:2867)

LEVEES

"Bank and Levee Stabilization, Lower Colorado River," John S. McEwan (Nov WW4:17:2987)

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"Grid Analysis by the Reaction Distribution Method," Irving Fader (Aug ST6:77:2879)

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"Viscoelastic Winkler Foundation with Shear Interaction," Arnold D. Kerr (June EM3:13:2830)

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"Aggregates and Fly-Ash Concrete for Barley Lock," Louis Campbell, Jr. (Mar CO1:1:2759)

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"Measurement of Displacement and Deformation by Geodetic Methods," F. Kobold (July SU2:37:2873)

"Pipeline Location: Reconnaissance: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb RL1:21:2740)

"Planning and Engineering Considerations for the Official Map," Kurt W. Bauer (Sept CP1:17:2931)

"Surveys for Spacecraft Tracking Sites," Robert C. Wigand (July SU2:1:2848)

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"Attenuation of Stress Waves in Bilinear Materials," Richard Skalak and Paul Weidlinger (June EM3:1:2829)

"Operative Energy Concept in Marine Fendering," Shu-t'ien Li (Aug WW3:1:2875)

"Range of Yield Conditions in Ideal Plasticity," R. M. Haythornthwaite (Dec EM6:117:3027)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

"Ultrasonic Evaluation of Reinforced Plastics," Albert G. H. Dietz (June EM3:31:2835)

"Uncertainties in Earth Dam Design," John M. Bird (June SM3:33:2832)

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"Analysis of Noncoplanar Elastic Rings," D. H. Pletta, W. C. Liessner, and Yen-Ming Yeh (Aug EM4:49:2887)

"Continuous Beam-Columns on Elastic Foundation," S. L. Lee, T. M. Wang, and J. S. Kao (Apr EM2:55:2801)

"Continuous Parabolic Interpolation," Willard M. Snyder (July HY4:99:2865)

"Dead-Load Stress in Model Dams by Method of Integration," Jerome M. Raphael (Aug ST6:31:2903)

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- "Deflection Theory of Arches," S. O. Asplund (Oct ST7:125:2963)
- "Equations for Plate-Beam Systems in Transverse Bending," Alfredo H.-S. Ang and Wallace Prescott (Dec EM6:1:3009)
- "Estimating Potential Evapotranspiration," W. Russell Hamon (May HY3:107:2817)
- "Free Surface Flow in Homogeneous Porous Medium," Roger De Wiest (July HY4:181:2871)
- "Frequency of Natural Events," H. C. Riggs (Jan HY1:15:2705)
- "General Solution of Space Frameworks," Ignacio Martin and Jose E. Hernandez (Aug ST6:47:2879)
- "Harbor Paradox," John Miles and Walter Munk (Aug WW3:111:2888)
- "Matrix Analysis of Structures Curved in Space," Frank Baron (Mar ST3:17:2779)
- "Minimum-Weight Design of Beams for Deflection," Ralph L. Barnett (Feb EM1:75:2741)
- "Safety, Reliability, and Structural Design," A. M. Freudenthal (Mar ST3:1:2764)
- "Spherical Waves in a Plastic Locking Medium," Mario G. Salvadori, Richard Skalak, and Paul Weidlinger (Feb EM1:1:2727)
- "Static and Dynamic Analysis of Guy Cables," Donald L. Dean (Jan ST1:1:2703)
- "String Polygon Analysis of Frames with Straight Members," Jan J. Tuma and John T. Oden (Oct ST7:63:2956)
- "Variational Methods in Fluid Dynamics," J. W. Delleur and A. A. Sooky (Dec EM6:57:3018)
- "Vector Aspects of Dynamic Similarity," R. C. Kolf and W. L. Reitmeyer (Mar HY2:19:2763)
- "Viscoelastic Winkler Foundation with Shear Interaction," Arnold D. Kerr (June EM3:13:2830)

METEOROLOGY

- "Cyclical Variations in World-Wide Hydrologic Data," Gordon R. Williams (Nov HY6:71:2982)
- "Displacement of Long Footings by Dynamic Loads," William L. Wallace (Oct SM5:45:2965)
- "Estimating the Probable Maximum Precipitation," David M. Hershfield (Sept HY5:99:2933)

METERS AND METERING

- "Development of a Variable Resistance Velocity Meter," Iury L. Maytin (Jan HY1:95:2713)

- "Prototype Measurements of the Columbia River Estuary," John B. Lockett and Harold L. Kidby (Jan HY1:57:2710)
- "Variable Head Technique for Seepage Meters," Herman Bouwer (Mar IR1:31:2775)
- "Water Balance Recorder," Hans C. Aslyng and Knud J. Kristensen (Mar IR1:15:2762)

MODELS (General)

- "Location and Number of Exit Taxiways," Robert Horonjeff (with discussion), (Aug AT2:99:2897)

MODELS, HYDRAULIC

- "Effect of Filtering on Model Recharge Wells," Leonard Schiff (Dec IR4:55:3015)
- "Forms of Bed Roughness in Alluvial Channels," D. B. Simons and E. V. Richardson (May HY3:87:2816)
- "Free Surface Flow in Homogeneous Porous Medium," Roger De Wiest (July HY4:181:2871)
- "Hydraulic Design of Hollow-Jet Valve Stilling Basins," Glenn L. Beichley and Alvin J. Peterka (Sept HY5:1:2924)
- "Interfacial Mixing in Stratified Flow," Enzo Oscar Macagno and Hunter Rouse (Oct EM5:55:2964)
- "Jet Discharge into a Fluid with a Density Gradient," William E. Hart (Nov HY6:171:2996)
- "Mechanics of Washout of an Erodible Fuse Plug," E. Roy Tinney and H. Y. Hsu (May HY3:1:2808)
- "Model and Prototype Research on Fish Ladders," Berton M. MacLean (July PO2:57:2856)
- "Non-Linear Tidal Flows and Electric Analogs," James A. Harder and Frank D. Masch, Jr. (Nov WW4:27:2988)
- "Pressures on Spillway Flip Buckets," Armando Balloffet (Sept HY5:87:2930)
- "Roughness Spacing in Rigid Open Channels," William W. Sayre and Maurice L. Albertson (May HY3:121:2823)
- "Seepage Through Layered Anisotropic Porous Media," David K. Todd and Jacob Bear (May HY3:31:2810)
- "Some Aspects of Surface Water Wave Scale Effects," Gerrit Abraham (Jan HY1:41:2708)
- "Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)
- "Uniform Flow in a Shallow, Triangular Open Channel," Richard J. Wasley (Sept HY5:149:2936)
- "Vector Aspects of Dynamic Similarity," R. C. Kolf and W. L. Reitmeyer (Mar HY2:19:2763)

MODELS, STRUCTURAL

- "Bending of Rectangular Plates," Mournir Badir (Aug ST6:105:2879)
- "Buckling Behavior Above the Tangent Modulus Load," Bruce G. Johnston (Dec EM6:79:3019)
- "Dead-Load Stress in Model Dams by Method of Integration," Jerome M. Raphael (Aug ST6:31:2903)
- "Equations for Plate-Beam Systems in Transverse Bending," Alfredo H.-S. Ang and Wallace Prescott (Dec EM6:1:3009)
- "Experimental and Analytical Study of a Folded Plate," A. C. Scordelis, E. L. Croy, and I. R. Stubbs (Dec ST8:139:3023)
- "Moire Fringes as a Means of Analyzing Strains," C. A. Sciammerella and A. J. Durelli (Feb EM1:55:2736)
- "Moment-Distribution Constants from Cardboard Analogs," Otakar Ondra (Jan ST1:73:2721)
- "Multiple Ribless Shells," Anton Tedesko (Oct ST7:107:2962)
- "Prestressed Bowstring Arch," Moses J. Kaldjian (Oct ST7:1:2953)
- "Summary of Prestressed Concrete Pavement Practices," F. M. Mellinger (Aug AT2:163:2897)
- "Wind-Induced Vibrations in Antenna Members," William Weaver, Jr. (Feb EM1:141:2748)

MOMENTS

- "Grid Analysis by the Reaction Distribution Method," Irving Fader (Aug ST6:77:2879)
- "Moment-Distribution Constants from Cardboard Analogs," Otakar Ondra (Jan ST1:73:2721)
- "Moments at Selected Points in Continuous Girders," George H. Dell (Dec ST8:193:3025)
- "Simplified Design of Combined Footings," Fritz Kramrisch and Paul Rogers (Oct SM5:19:2959)
- "Stability of Frames in the Presence of Primary Bending Moments," E. F. Masur, I. C. Chang, and L. H. Donnell (Aug EM4:19:2882)

PAVEMENT AND PAVING (General)

- "Runway Roughness Studies in the Aeronautical Field," John C. Houbolt (Mar AT1:11:2774)

PAVEMENTS AND PAVING, CONCRETE

- "Summary of Prestressed Concrete Pavement Practices," F. M. Mellinger (Aug AT2:163:2897)

PENSTOCKS

- "Penstocks and Scroll Cases for Niagara Power Project," J. Edgar Revelle and John N. Pirok (Nov PO3:1:2979)

PETROLEUM

- "Marine Foundation Construction in Oil Fields," S. J. Mathis (Mar CO1:17:2768)
- "Tank Foundations in Eastern Venezuela," Emery D. Carlson and Stephen P. Fricano (Oct SM5:69:2966)

PILES AND PILE DRIVING

- "Marine Foundation Construction in Oil Fields," S. J. Mathis (Mar CO1:17:2768)
- "Pile Heave and Redriving," Earle J. Klohn (Aug SM4:125:2905)
- "Steel Pile Marine Corrosion and Cathodic Protection," Carter Hale Horton (Aug WW3:59:2877)
- "Timber Piles in Permafrost at Alaskan Radar Station," Willard C. Jensen (Feb SM1:15:2734)
- "Underpinning of a Wind Tunnel," James F. McNulty and James S. O'Brien (Feb SM1:1:2732)

PIPELINES

- "Foundation Stability for a Submarine Liquid Sulphur Pipeline," Basil W. Wilson (Aug SM4:1:2878)
- "Fundamentals of Cathodic Protection," Jack W. Pierce (Sept PL2:35:2939)
- "Highway Pipeline Crossing Practice—Progress Report, Committee on Pipeline Crossing," R. Robinson Rowe (Sept HW3:11:2947)
- "Pipeline Location: As Built Records: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:1:2737)
- "Pipeline Location: Duties of the Engineer on Construction: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:17:2739)
- "Pipeline Location: Engineering Service Agreement: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:9:2738)
- "Pipeline Location: Location Surveys: Progress Report, Task Committee on Pipeline Location," E. O. Scott, Chrm (Sept PL2:1:2922)
- "Pipeline Location: Reconnaissance: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:21:2740)

PIPELINES Continued

- "Rational Design for Pipelines Across Inundated Areas: Progress Report, Task Committee on Flotation Studies, Pipeline Division," Robert A. Rait. Chrm (Feb PL1:31:2755)
- "Relationship of Compression Ratio to Gas Pipelines," Raymond R. Crawford (Sept PL2:11:2932)

PIPES AND PIPING

- "Fundamentals of Cathodic Protection," Jack W. Pierce (Sept PL2:35:2939)
- "Relationship of Compression Ratio to Gas Pipelines," Raymond R. Crawford (Sept PL2:11:2932)

PLASTICITY

- "Analysis of Frames Loaded into the Plastic Range," Morris Ojalvo and Le-Wu Lu (Aug EM4:35:2884)
- "Dynamic Elastic-Plastic Analysis of Structures," Melvin L. Baron, Hans H. Bleich, and Paul Weidlinger (Feb EM1:23:2731)
- "Post-Elastic Behavior of Wide-Flange Steel Beams," Herbert A. Sawyer, Jr. (Dec ST8:43:3016)
- "Range of Yield Conditions in Ideal Plasticity," R. M. Haythornthwaite (Dec EM6:117:3027)
- "Recent Trends in Ultimate Strength Design," Phil M. Ferguson (Jan ST1:57:2715)
- "Spherical Waves in a Plastic Locking Medium," Mario G. Salvadori, Richard Skalak, and Paul Weidlinger (Feb EM1:1:2727)

PLATES

- "Bending and Stretching of Laminated Aelotropic Plates," Yehuda Stavsky (Dec EM6:31:3017)
- "Bending of Rectangular Plates," Mournir Badir (Aug ST6:105:2879)
- "Equations for Plate-Beam Systems in Transverse Bending," Alfredo H.-S. Ang and Wallace Prescott (Dec EM6:1:3009)
- "Experimental and Analytical Study of a Folded Plate," A. C. Scordelis, E. L. Croy, and I. R. Stubbs (Dec ST8:139:3023)
- "Folded Plate Structures of Light Gage Steel," Arthur H. Nilson (Oct ST7:215:2970)
- "Postbuckling Behavior of Flat Plates," J. R. Jombock and J. W. Clark (June ST5:17:2844)
- "Steel Frame Folded Plate Roof," Oliver A. Baer (June ST5:35:2845)
- "Stresses at a Re-Entrant Corner of a Plate," Mario G. Salvadori (Oct ST7:91:2956)

- "Viscoelastic Plate on a Viscoelastic Foundation," Karl S. Pister (Feb EM1:43:2735)

POLLUTION, OCEAN

- "Sanitary Consideration of Five-Mile Ocean Outfall," Charles H. Lawrence (July SA4:1:2858)

POLLUTION, STREAM

- "Chlorination of Mixed Sewage and Storm Water," Thomas R. Camp (Jan SA1:1:2701)
- "Fisheries Statistics in Evaluating Claims of Pollution," Roger Tollefson (May SA3:11:2818)
- "Pollution of the Androscoggin River," E. Sherman Chase (Mar SA2:9:2771)

POWER (General)

- "Atomic Power, A Failure in Engineering Responsibility," Adolph J. Ackerman (Oct PP2:43:2975)
- "Cooling Pond Design in the Southwest," T. J. Cotter and A. W. Lotz (July PO2:85:2861)
- "Current Developments in Hydro-Electric Plant Design," William H. Wolf (Nov PO3:55:2995)
- "Electronic Computer Use in Scoping Power Projects," Parker R. Grimes and Glenn H. Von Gunten (Jan PO1:1:2709)
- "Fish Passage Through Hydraulic Turbines," Glenn H. Von Gunten (May HY3:59:2812)
- "Glen Canyon Powerplant," Samuel Judd (July PO2:41:2855)
- "Model and Prototype Research on Fish Ladders," Berton M. MacLean (July PO2:57:2856)
- "Oroville Dam and Appurtenant Features," W. G. Schulz, D. P. Thayer, and J. J. Doody (July PO2:29:2852)
- "Power from the Sea," El Sayed Mohamed Hassan (July PO2:21:2850)
- "Private Power Development of an Entire River," Richard S. Woodruff (July PO2:69:2857)
- "Stress Analysis and Special Problems of Prestressed Dams," O. C. Zienkiewicz and R. W. Gerstner (Jan PO1:7:2714)
- "Studies for the Lower Monumental Power Plant," Benjamin F. Smith (July PO2:1:2847)
- "Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

POWER (Geographical)

- Baker River
 - "Fish Handling Facilities for Baker River Project," Warner W. Wayne, Jr. (Nov PO3:23:2993)

POWER (Geographical) Continued**Niagara River**

"Penstocks and Scroll Cases for Niagara Power Project," J. Edgar Revelle and John N. Pirok (Nov PO3:1:2979)

Yugoslavia

"Underground Power Plants in Yugoslavia," V. M. Yevdjevich (Nov PO3:81:2998)

POWER PLANTS (General)

"Atomic Power, A Failure in Engineering Responsibility," Adolph J. Ackerman (Oct PP2:43:2975)

"Cooling Pond Design in the Southwest," T. J. Cotter and A. W. Lotz (July PO2:85:2861)

"Current Developments in Hydro-Electric Plant Design," William H. Wolf (Nov PO3:55:2995)

"Electronic Computer Use in Scoping Power Projects," Parker R. Grimes and Glenn H. Von Gunten (Jan PO1:1:2709)

"Studies for the Lower Monumental Power Plant," Benjamin F. Smith (July PO2:1:2847)

POWER PLANTS (Geographical)**Alabama**

"Private Power Development of an Entire River," Richard S. Wo druff (July PO2:69:2875)

Arizona

"Glen Canyon Powerplant," Samuel Judd (July PO2:41:2855)

Niagara River

"Penstocks and Scroll Cases for Niagara Power Project," J. Edgar Revelle and John N. Pirok (Nov PO3:1:2979)

Yugoslavia

"Underground Power Plants in Yugoslavia," V. M. Yevdjevich (Nov PO3:81:2998)

PROBABILITY, THEORY OF

"Frequency of Natural Events," H. C. Riggs (Jan HY1:15:2706)

"Queueing Theory and Simulation in Reservoir Design," Myron B. Flering (Nov HY6:39:2981)

"Safety, Reliability, and Structural Design," A. M. Freudenthal (Mar ST3:1:2764)

PROFESSIONAL PRACTICE

"Atomic Power, A Failure in Engineering Responsibility," Adolph J. Ackerman (Oct PP2:43:2975)

"Meaning of the Professional License to Engineers," Donald Kowtko (Jan PP1:9:2699)

"Research and Civil Engineering Education," Nathan M. Newmark (Oct PP2:1:2950)

"Research and the Professional Society," Arthur T. Ippen (Oct PP2:35:2952)

"Research for Survival," Arthur G. Trudeau (Oct PP2:15:2951)

"Status of State Registration Laws," William N. Spann (Jan PP1:1:2698)

PUBLIC HEALTH

"Chlorination of Mixed Sewage and Storm Water," Thomas R. Camp (Jan SA1:1:2701)

"Coliform Organisms as an Index of Water Safety: Progress Report, Committee on Public Health Activities," Charles L. Senn, Chrm (Nov SA6:41:2986)

"Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)

RAINFALL (General)

"Cyclical Variations in World-Wide Hydrologic Data," Gordon R. Williams (Nov HY6:71:2982)

"Estimating the Probable Maximum Precipitation," David M. Hershfield (Sept HY5:99:2933)

"Forecasting River Runoff by Coastal Flow Index," David M. Rockwood and Carlton E. Jencks (Mar HY2:121:2780)

"Power from the Sea," El Sayed Mohamed Hassan (July PO2:21:2850)

"Synthetic Unit Hydrographs for Small Watersheds," Don M. Gray (July HY4:33:2854)

REFUSE DISPOSAL

"Research on Composting of City Refuse and Nightsoil," Yonosuke Kaibuchi (Nov SA6:101:3002)

REPORTS OF COMMITTEES

"Aerated Flow in Open Channels: Progress Report, Task Committee on Air Entrainment in Open Channels, Committee on Hydromechanics, Hydraulics Division," Norman H. Brooks, Chrm (May HY3:73:2814)

"Coliform Organisms as an Index of Water Safety: Progress Report, Committee on Public Health Activities," Charles L. Senn, Chrm (Nov SA6:41:2986)

REPORTS OF COMMITTEES Continued

"Effect of Water Temperature on Stream Reaeration: Thirty-first Progress Report, Committee on Sanitary Engineering Research," N. L. Nemerow, Chrm (Nov SA6:59:2997)

"Highway and Bridge Surveys: Construction Surveys: Part I Triangulation: Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division," Milton O. Schmidt, Chrm (Jan SU1:13:2705)

"Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division," Milton O. Schmidt, Chrm (July SU2:9:2853)

"Highway Pipeline Crossing Practice—Progress Report, Committee on Pipeline Crossing," R. Robinson Rowe (Sept HW3:11:2947)

"Marine Disposal of Wastes: Progress Report, Subcommittee on Specialized Subjects, Committee on Sewerage and Sewage Treatment," Kerwin L. Mick, Chrm (Jan SA1:23:2717)

"Pipeline Location: As-Built Records: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:1:2737)

"Pipeline Location: Duties of the Engineer on Construction: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:17:2739)

"Pipeline Location: Engineering Service Agreement: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:9:2738)

"Pipeline Location: Location Surveys: Progress Report, Task Committee on Pipeline Location," E. O. Scott, Chrm (Sept PL2:1:2922)

"Pipeline Location: Reconnaissance: Progress Report, Task Committee on Pipeline Location, Pipeline Division," E. O. Scott, Chrm (Feb PL1:21:2740)

"Rational Design for Pipelines Across Inundated Areas: Progress Report, Task Committee on Flotation Studies, Pipeline Division," Robert A. Rait, Chrm (Feb PL1:31:2755)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

"Surveying and Mapping Division 1926–1960," Report of the Chairman, Executive Committee, Earle J. Fennell, Chrm (July SU2:29:2859)

"Survey of Sanitary Landfill Practices: Thirtieth Progress Report," Committee on Sanitary Engineering Research, Sanitary Engineering Division, N. L. Nemerow, Chrm (July SA4:65:2874)

RESEARCH

"Needs in Sedimentation," H. A. Einstein (Mar HY2:1:2756)

"Research and Civil Engineering Education," Nathan M. Newmark (Oct PP2:1:2950)

"Research and the Professional Society," Arthur T. Ippen (Oct PP2:35:2952)

"Research for Survival," Arthur G. Trudeau (Oct PP2:15:2951)

"Research on Composting of City Refuse and Nightsoil," Yonosuke Kaibuchi (Nov SA6:101:3002)

"Sanitary Engineering Education in a Changing World," Daniel A. Okun (July SA4:47:2862)

"Symposium on Grouting: Research in Foundation Grouting with Cement," Thomas B. Kennedy (Apr SM2:55:2794)

RESERVOIRS (General)

"Eddy Diffusion in Reservoirs," Frank L. Parker (May HY3:151:2825)

"Hydrodynamics of Flow into Curb-Opening Inlets," Richard J. Wasley (Aug EM4:1:2880)

"Needs in Sedimentation," H. A. Einstein (Mar HY2:1:2756)

"Queuing Theory and Simulation in Reservoir Design," Myron B. Fiering (Nov HY6:39:2981)

RESERVOIRS, MULTI-PURPOSE

"Cost Allocation of Water Projects in California," Amalio Gomez (Mar HY2:7:2760)

RESERVOIRS, WATER STORAGE

"Synthetic Unit Hydrographs for Small Watersheds," Don M. Gray (July HY4:33:2854)

RIVERS (General)

"Economics of River Bank Stabilization," Charles Senour (May WW2:17:2809)

"Forecasting River Runoff by Coastal Flow Index," David M. Rockwood and Carlton E. Jencks (Mar HY2:121:2780)

RIVERS (Geographical)

Alabama

"Private Power Development of an Entire River," Richard S. Woodruff (July PO2:69:2857)

Baker River

"Fish Handling Facilities for Baker River Project," Warner W. Wayne, Jr. (Nov PO3:23:2993)

Colorado River

"Bank and Levee Stabilization, Lower Colorado River," John S. McEwan (Nov WW4:17:2987)

"Total Sediment Transport in the Lower Colorado River," John R. Sheppard (Nov HY6:139:2990)

Columbia River

"Electronic Computer Use in Scoping Power Projects," Parker R. Grimes and Glenn H. Von Gunten (Jan PO1:1:2709)

"Prototype Measurements of the Columbia River Estuary," John B. Lockett and Harold L. Kidby (Jan HY1:57:2710)

Kansas River

"Use of Computers for Kansas River Flood Studies," William L. Northrop and Clarence W. Timberman (July HY4:113:2866)

Mississippi River

"Hydraulics of Southwest Pass, Mississippi River," Chester A. Peyronnin, Jr. (Jan HY1:103:2716)

Rio Grande

"Stabilization of the Middle Rio Grande in New Mexico," Robert C. Woodson (Nov WW4:1:2980)

Snake River

"Electronic Computer Use in Scoping Power Projects," Parker R. Grimes and Glenn H. Von Gunten (Jan PO1:1:2709)

Texas

"Irrigation and Drainage Studies of Texas Rivers," Rolland F. Kaser (Sept IR3:13:2928)

RUNOFF (General)

"Cyclical Variations in World-Wide Hydrologic Data," Gordon R. Williams (Nov HY6:71:2982)

"Forecasting River Runoff by Coastal Flow Index," David M. Rockwood and Carlton E. Jencks (Mar HY2:121:2780)

"Hydraulic Computation from Limited Information," Cecil K. Oakes (Jan HY1:85:2711)

"Hydrogeologic Nature of Streamflow on Small Watersheds," J. L. McGuinness, L. L. Harrold and C. R. Amerman (Jan HY1:1:2700)

SAFETY

"Philosophical Aspects of Structural Design," Hsuan Loh Su (June ST5:1:2843)

"Safety, Reliability, and Structural Design," A. M. Freudenthal (Mar ST3:1:2764)

"Slope Stability Analysis by a New Graphical Method," M. Arnold (Oct SM5:1:2954)

SAND

"Aggregates and Fly-Ash Concrete for Barley Lock," Louis Campbell, Jr. (Mar CO1:1:2759)

"Impact Waves in Sand: Implications of an Elementary Theory," Blaine R. Parkin (Aug SM4:147:2912)

"Impact Waves in Sand: Theory Compared with Experiments on Sand Columns," Blaine R. Parkin (June SM3:1:2828)

"Static and Dynamic Behavior of Small Footings," E. T. Selig and K. E. McKee (Dec SM6:29:3020)

"Symposium on Grouting: Investigation of Sand-Cement Grouts," James M. Polatty (Apr SM2:83:2795)

SANITARY ENGINEERING

"Chlorination of Mixed Sewage and Storm Water," Thomas R. Camp (Jan SA1:1:2701)

"Coliform Organisms as an Index of Water Safety: Progress Report, Committee on Public Health Activities," Charles L. Senn, Chrm (Nov SA6:41:2986)

"Dissolved Solids Removal from Waste Water by Algae," Albert F. Bush, John D. Isherwood, and Shiva Rodgi (May SA3:39:2824)

"Effect of Water Temperature on Stream Reaeration: Thirty-first Progress Report, Committee on Sanitary Engineering Research," N. L. Nemerow, Chrm (Nov SA6:59:2997)

"Filtration Using Radioactive Algae," Kenneth J. Ives (May SA3:23:2820)

"Fisheries Statistics in Evaluating Claims of Pollution," Roger Tollefson (May SA3:11:2818)

"Marine Disposal of Wastes: Progress Report, Subcommittee on Specialized Subjects, Committee on Sewerage and Sewage Treatment," Kerwin L. Mick, Chrm (Jan SA1:23:2717)

"Pollution of the Androscoggin River," E. Sherman Chase (Mar SA2:9:2771)

"Radiological Curricula for Sanitary Engineers," John E. Kiker, Jr. and F. Wellington Gilcreas (Mar SA2:1:2767)

SANITARY ENGINEERING Continued

"Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)

"Removal of Floatables from Digested Sludge," R. J. Theroux, C. H. Lawrance, and N. B. Hume (Mar SA2:21:2778)

"Research on Composting of City Refuse and Nightsoil," Yonosuke Kaibuchi (Nov SA6:101:3002)

"Sanitary Considerations of Five-Mile Ocean Outfall," Charles H. Lawrance (July SA4:1:2858)

"Sanitary Engineering Comes of Age," P. H. McGauhey (May SA3:1:2806)

"Sanitary Engineering Education in a Changing World," Daniel A. Okun (July SA4:47:2862)

"Storm Water and Combined Sewage Overflows," Samuel A. Greeley and Paul E. Langdon (Jan SA1:57:2718)

"Survey of Sanitary Landfill Practices: Thirtieth Progress Report," Committee on Sanitary Engineering Research, Sanitary Engineering Division, N. L. Nemerow, Chrm (July SA4:65:2874)

"Trickling Filtration Design and Performance," Wesley Eckenfelder, Jr. (July SA4:33:2860)

"Upflow Solids Contact Basin," A. W. Bond (Nov SA6:73:3001)

SEDIMENT AND SEDIMENTATION

"Bank and Levee Stabilization, Lower Colorado River," John S. McEwan (Nov WW4:17:2987)

"Estuarial Sediment Transport Patterns," H. A. Einstein and R. B. Krone (Mar HY2:51:2770)

"Needs in Sedimentation," H. A. Einstein (Mar HY2:1:2756)

"Some Legal Aspects of Sedimentation," C. E. Busby (July HY4:151:2867)

"Stability of Alluvial Channels," Francis M. Henderson (Nov HY6:109:2984)

"Study of Scour Around Spur-Dikes," R. J. Garde, K. Subramanya, and K. D. Nambudripad (Nov HY6:23:2978)

"Total Sediment Transport in the Lower Colorado River," John R. Sheppard (Nov HY6:139:2990)

SEEPAGE

"Analysis of Seepage Problems," Milton E. Harr and Robert C. Deen (Oct SM5:91:2971)

"Relation of Intake Rate to Length of Run in Surface Irrigation," A. Alvin Bishop (Mar IR1:23:2769)

"Seepage Through Layered Anisotropic Porous Media," David K. Todd and Jacob Bear (May HY3:31:2810)

"Variable Head Technique for Seepage Meters," Herman Bouwer (Mar IR1:31:2775)

SEWAGE DISPOSAL (General)

"Jet Discharge into a Fluid with a Density Gradient," William E. Hart (Nov HY6:171:2996)

"Marine Disposal of Wastes: Progress Report, Subcommittee on Specialized Subjects, Committee on Sewerage and Sewage Treatment," Kerwin L. Mick, Chrm (Jan SA1:23:2717)

"Removal of Floatables from Digested Sludge," R. J. Theroux, C. H. Lawrance, and N. B. Hume (Mar SA2:21:2778)

SEWAGE DISPOSAL (Geographical)

Australia

"Upflow Solids Contact Basin," A. W. Bond (Nov SA6:73:3001)

California

"Sanitary Considerations of Five-Mile Ocean Outfall," Charles H. Lawrance (July SA4:1:2858)

Japan

"Research on Composting of City Refuse and Nightsoil," Yonosuke Kaibuchi (Nov SA6:101:3002)

SEWAGE SLUDGE

"Metabolism of Organic Sulfonates by Activated Sludge," James M. Symons and Luis A. Del Valle-Rivera (Sept SA5:53:2942)

"Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)

"Refuse-Sludge Compositing in Windrows and Bins," John S. Wiley and Janet T. Spillane (Sept SA5:33:2941)

SEWERS (General)

"Effects of Hydrogen Sulfide on Concrete Structures," Bernal H. Swab (Sept SA5:1:2921)

"Storm Water and Combined Sewage Overflows," Samuel A. Greeley and Paul E. Langdon (Jan SA1:57:2718)

SEWERS (Geographical)

California

"Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)

"Sanitary Considerations of Five-Mile Ocean Outfall," Charles H. Lawrance (July SA4:1:2858)

SHEAR

- "Strength of Plate Girders in Shear," Konrad Basler (Oct ST7:151:2967)
- "Strength of Plate Girders Under Combined Bending and Shear," Konrad Basler (Oct ST7:181:2968)
- "Tests of Composite Beams with Stud Shear Connectors," Charles Culver and Robert Coston (Feb ST2:1:2742)
- "Vibration of Shear Buildings by Flexibility Method," Ming L. Pei (Feb EM1:13:2728)
- "Viscoelastic Winkler Foundation with Shear Interaction," Arnold D. Kerr (June EM3:13:2830)

SHELL STRUCTURES

- "Multiple Ribless Shells," Anton Tedesko (Oct ST7:107:2962)
- "Stress Analysis of Translational Shells," Kristoffer Apeland (Feb EM1:111:2743)

SHORES AND SHORE PROTECTION

- "Bank and Levee Stabilization, Lower Colorado River," John S. McEwan (Nov WW4:17:2987)
- "Behavior of Beach Fills in New England," Harry S. Perdakis (Feb WW1:75:2744)
- "Columbia River Ship Channel Improvement and Maintenance," Robert E. Hickson (Aug WW3:71:2883)
- "Economics of River Bank Stabilization," Charles Senour (May WW2:17:2809)
- "Groins on the Shores of the Great Lakes," Charles E. Lee (May WW2:89:2819)
- "Stabilization of the Middle Rio Grande in New Mexico," Robert C. Woodson (Nov WW4:1:2980)
- "Synthetic Material Filters in Coastal Protection," Hans A. Agerschou (Feb WW1:111:2745)

SILT AND SILTING, CHANNEL

- "Shoaling of the Lower Hudson River," Charles M. Duke (Feb WW1:29:2730)

SILT AND SILTING (General)

- "Estuarial Sediment Transport Patterns," H. A. Einstein and R. B. Krone (Mar HY2:51:2770)
- "Hydraulics of Southwest Pass, Mississippi River," Chester A. Peyronnin, Jr. (Jan HY1:103:2716)
- "Needs in Sedimentation," H. A. Einstein (Mar HY2:1:2756)
- "Small-Boat Development on the Pacific Coast," Reuben J. Johnson (Feb WW1:1:2726)

SOIL MECHANICS

- "Analysis of Seepage Problems," Milton E. Harr and Robert C. Deen (Oct SM5:91:2971)
- "Behavior of Beach Fills in New England," Harry S. Perdakis (Feb WW1:75:2744)
- "Cohesion After Non-Hydrostatic Consolidation," John H. Schmertmann and John R. Hall, Jr. (Aug SM4:39:2881)
- "Design of Interceptor Drains in Heterogeneous Soils," R. William Nelson (Dec IR4:41:3011)
- "Geophysics Efficient in Exploring the Subsurface," R. Woodward Moore (June SM3:69:2838)
- "Impact Waves in Sand: Implications of an Elementary Theory," Blaine R. Parkin (Aug SM4:147:2912)
- "Impact Waves in Sand: Theory Compared with Experiments on Sand Columns," Blaine R. Parkin (June SM3:1:2828)
- "Influence of Geological Conditions on Uplift," W. Harold Stuart (Dec SM6:1:3008)
- "Multiple Soil Sampler," P. J. Parsons (Dec SM6:19:3012)
- "New Method of Consolidation-Coefficient Evaluation," Ronald F. Scott (Feb SM1:29:2746)
- "Secondary Compression of Clays," K. Y. Lo (Aug SM4:61:2885)
- "Simplified Design of Combined Footings," Fritz Kramrisch and Paul Rogers (Oct SM5:19:2959)
- "Slope Stability Analysis by a New Graphical Method," M. Arnold (Oct SM5:1:2954)
- "Static and Dynamic Behavior of Small Footings," E. T. Selig and K. E. McKee (Dec SM6:29:3020)
- "Symposium on Grouting: Grouting of Granular Materials," John C. King and Edward G. W. Bush (Apr SM2:1:2791)

SPILLWAYS (General)

- "Free Streamline Theory for Segmental Jet Deflectors," E. Roy Tinney, Wilfred E. Barnes, Otis W. Rechard, and Glenn R. Ingram (Sept HY5:135:2935)
- "Mechanics of Washout of an Erodible Fuse Plug," E. Roy Tinney and H. Y. Hsu (May HY3:1:2808)
- "Oroville Dam and Appurtenant Features," W. G. Shulz, D. P. Thayer, and J. J. Doody (July PO2:29:2852)
- "Pressures on Spillway Flip Buckets," Armando Balloffet (Sept HY5:87:2930)

SPILLWAYS (Geographical)

- Washington
- "Stilling Basin Damage at Chief Joseph

SPILLWAYS (Geographical) Continued
 Dam," Robert H. Gedney (Mar HY2:97:2777)

STEEL

"Brittle Fractures Explained by Negative Residuals," L. E. Grinter (Apr EM2:25:2799)

"Cathodic Protection of Marine Terminal Facilities," Joseph Milano (May WW2:27:2811)

"Corrosion of Steel Piles in Salt Water," James R. Ayers and Ralph C. Stokes (Aug WW3:95:2886)

"Economy of High Strength Steel Structural Members," Geerhard Haaijer (Dec ST8:1:3010)

"Folded Plate Structures of Light Gage Steel," Arthur H. Nilson (Oct ST7:215:2970)

"Post-Elastic Behavior of Wide-Flange Steel Beams," Herbert A. Sawyer, Jr. (Dec ST8:43:3016)

"Steel Pile Marine Corrosion and Cathodic Protection," Carter Hale Horton (Aug WW3:59:2877)

STREETS

"Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)

STRESS AND STRAIN

"Attenuation of Stress Waves in Bilinear Materials," Richard Skalak and Paul Weidlinger (June EM3:1:2829)

"Dead-Load Stress in Model Dams by Method of Integration," Jerome M. Raphael (Aug ST6:31:2903)

"Elastic Rayleigh Wave Effects Due to Nuclear Blasts," Melvin L. Baron and Charles Lecht (Oct EM5:33:2961)

"Recent Trends in Ultimate Strength Design," Phil M. Ferguson (Jan ST1:57:2715)

"Stress Analysis and Special Problems of Prestressed Dams," O. C. Zienkiewicz and R. W. Gerstner (Jan PO1:7:2714)

"Stress Analysis of Translational Shells," Kristoffer Apeland (Feb EM1:11:2743)

"Stresses at a Re-Entrant Corner of a Plate," Mario G. Salvadori (Oct ST7:91:2956)

"Stresses in Ring Stiffeners in Cylinders," Wadi S. Rumman (Dec ST8:161:3024)

STRUCTURAL DYNAMICS

"Effect of Joint Rotation on Dynamics of Structures," Moshe F. Rubinstein and Walter C. Hurty (Dec EM6:135:3028)

STRUCTURAL ENGINEERING

"Analysis of Frames Loaded into the Plastic Range," Morris Ojalvo and Le-Wu Lu (Aug EM4:35:2884)

"Analysis of Noncoplanar Elastic Rings," D. H. Pletta, W. C. Liessner, and Yen-Ming Yeh (Aug EM4:49:2887)

"Analysis of Structures by Combining Redundants," Peter P. Gillis and Kurt H. Gerstle (Jan ST1:41:2712)

"Bending and Stretching of Laminated Aeolotropic Plates," Yehuda Stavsky (Dec EM6:31:3017)

"Bending of Rectangular Plates," Mournir Badir (Aug ST6:105:2908)

"Buckling Behavior Above the Tangent Modulus Load," Bruce G. Johnston (Dec EM6:79:3019)

"Conjugate Beam Simulated by Electric Circuits," S. Freiberg (Aug EM4:91:2909)

"Dead-Load Stress in Model Dams by Method of Integration," Jerome M. Raphael (Aug ST6:31:2903)

"Deflection Theory of Arches," S. O. Asplund (Oct ST7:125:2963)

"Dynamic Response of Highway Bridges," John F. Fleming and James P. Romualdi (Oct ST7:31:2955)

"Economy of High Strength Steel Structural Members," Geerhard Haaijer (Dec ST8:1:3010)

"Effect of Joint Rotation on Dynamics of Structures," Moshe F. Rubinstein and Walter C. Hurty (Dec EM6:135:3028)

"Effect of Structure and Foundation Interaction," Daniel L. Lycan and Nathan M. Newmark (Oct EM5:1:2960)

"Elastic Rayleigh Wave Effects Due to Nuclear Blasts," Melvin L. Baron and Charles Lecht (Oct EM5:33:2961)

"Elastomeric Pads as Bearings for Steel Beams," Hardy E. Fairbanks (Dec ST8:73:3021)

"Experimental and Analytical Study of a Folded Plate," A. C. Scordelis, E. L. Croy, and I. R. Stubbs (Dec ST8:139:3023)

"Folded Plate Structures of Light Gage Steel," Arthur H. Nilson (Oct ST7:215:2970)

"Further Studies of the Strength of Beam-Columns," Robert L. Ketter (Aug ST6:135:2915)

"General Solution of Space Frameworks," Ignacio Martin and Jose E. Hernandez (Aug ST6:47:2904)

"Grid Analysis by the Reaction Distribution Method," Irving Fader (Aug ST6:77:2906)

"Lateral Inelastic Buckling of Tied Arches," Chin Fung Kee (Jan ST1:23:2704)

STRUCTURAL ENGINEERING Continued

"Matrix Analysis of Structures Curved in Space," Frank Baron (Mar ST3:17:2779)

"Method of Internal Constraints and Its Application," Enrico Volterra (Aug EM4:103:2911)

"Minimum-Weight Design of Beams for Deflections," Ralph L. Barnett (Feb EM1:75:2741)

"Moment-Distribution Constants from Cardboard Analogs," Otakar Ondra (Jan ST1:73:2721)

"Moments at Selected Points in Continuous Girders," George H. Dell (Dec ST8:193:3025)

"Multiple Ribless Shells," Anton Tedesko (Oct ST7:107:2962)

"Philosophical Aspects of Structural Design," Hsuan Loh Su (June ST5:1:2843)

"Postbuckling Behavior of Flat Plates," J. R. Jombeck and J. W. Clark (June ST5:17:2844)

"Post-Elastic Behavior of Wide-Flange Steel Beams," Herbert A. Sawyer, Jr. (Dec ST8:43:3016)

"Prestressed Bowstring Arch," Moses J. Kaldjian (Oct ST7:1:2953)

"Recent Advances in the Design and Behavior of Concrete Bridges," Hubert Rüschi (Oct ST7:199:2969)

"Recent Trends in Ultimate Strength Design," Phil M. Ferguson (Jan ST1:57:2715)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

"Restraint of Structures Attached to Mass Concrete," Keith Jones (Dec ST8:25:3014)

"Safety, Reliability, and Structural Design," A. M. Freudenthal (Mar ST3:1:2764)

"Stability of Frames in the Presence of Primary Bending Moments," E. F. Masur, I. C. Chang, and L. H. Donnell (Aug EM4:19:2882)

"Static and Dynamic Analysis of Guy Cables," Donald L. Dean (Jan ST1:1:2703)

"Steel Frame Folded Plate Roof," Oliver A. Baer (June ST5:35:2845)

"Strength and Design of Metal Beam-Columns," Walter J. Austin (Apr ST4:1:2802)

"Strength of Plate Girders in Bending," Konrad Basler and Bruno Thurlimann (Aug ST6:153:2913)

"Strength of Plate Girders in Shear," Konrad Basler (Oct ST7:151:2967)

"Strength of Plate Girders Under Combined Bending and Shear," Konrad Basler (Oct ST7:181:2968)

"Stress Analysis and Special Problems of Prestressed Dams," O. C. Zienkiewicz and R. W. Gerstner (Jan PO1:7:2714)

"Stresses at a Re-Entrant Corner of a Plate," Mario G. Salvadori (Oct ST7:91:2957)

"Stresses in Ring Stiffeners in Cylinders," Wadi S. Rumman (Dec ST8:161:3024)

"String Polygon Analysis of Frames with Straight Members," Jan J. Tuma and John T. Oden (Oct ST7:63:2956)

"Tests of Composite Beams with Stud Shear Connectors," Charles Culver and Robert Coston (Feb ST2:1:2742)

"Torsional Behavior of Suspension Bridge Towers," Frank Baron and Anthony G. Ariotti (Aug ST6:1:2879)

"Vibration Analysis for Structural Floor Systems," Lawrence R. Burkhardt (Oct ST7:97:2958)

STRUCTURAL MECHANICS

"Uniformly Moving Load on a Layered Half Plane," J. L. Sackman (Aug EM4:75:2907)

STRUCTURES (General)

"Dynamic Elastic-Plastic Analysis of Structures," Melvin L. Baron, Hans H. Bleich, and Paul Weidlinger (Feb EM1:23:2731)

"Philosophical Aspects of Structural Design," Hsuan Loh Su (June ST5:1:2843)

"Vibration Problems in Hydraulic Structures," Frank B. Campbell (Mar HY2:61:2772)

STRUCTURES, THEORY OF (General)

"Analysis of Structures by Combining Redundants," Peter P. Gillis and Kurt H. Gerstle (Jan ST1:41:2712)

"Response of Multi-Story Structures to Earthquakes," Glen V. Berg (Apr EM2:1:2790)

SURVEYING

"Highway and Bridge Surveys: Construction Surveys: Part I Triangulation: Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division," Milton O. Schmidt, Chrm (Jan SU1:13:2705)

SURVEYING Continued

"Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division, Milton O. Schmidt, Chrm (July SU2:9:2853)

"Measurement of Displacement and Deformation by Geodetic Methods," F. Kobold (July SU2:37:2873)

"Pipeline Location: Location Surveys: Progress Report, Task Committee on Pipeline Location," E. O. Scott, Chrm (Sept PL2:1:2922)

"Surveying and Mapping Division 1926-1960," Report of the Chairman, Executive Committee, Earle J. Fennell, Chrm (July SU2:29:2859)

"Surveys for Spacecraft Tracking Sites," Robert C. Wigand (July SU2:1:2848)

"Surveys for the Lake Pontchartrain Bridge," James M. Tuttle (Jan SU1:1:2702)

SURVEYS AND SURVEYING, PLANE

"Pipeline Location: Location Surveys: Progress Report, Task Committee on Pipeline Location," E. O. Scott, Chrm (Sept PL2:1:2922)

"Surveys for the Lake Pontchartrain Bridge," James M. Tuttle (Jan SU1:1:2702)

TANKS (General)

"Tank Foundations in Eastern Venezuela," Emery D. Carlson and Stephen P. Fricano (Oct SM5:69:2966)

TANKS, SEDIMENTATION (Sewage)

"Upflow Solids Contact Basin," A. W. Bond (Nov SA6:73:3001)

TESTS AND TESTING

"Aquifer Tests on Partially Penetrating Wells," Mahdi S. Hantush (Sept HY5:171:2943)

"Cohesion After Non-Hydrostatic Consolidation," John H. Schmertmann and John R. Hall, Jr. (Aug SM4:39:2881)

"Dual Channel Stream Monitor," Susumu S. Karaki, Earl E. Gray, and Jack Collins (Nov HY6:1:2976)

"Dynamic Response of Highway Bridges," John F. Fleming and James P. Romualdi (Oct ST7:31:2955)

"Effect of Water Temperature on Steam Reaeration: Thirty-first Progress Report, Committee on Sanitary Engineering Research," N. L. Nemerow, Chrm (Nov SA6:59:2997)

"Experimental and Analytical Study of a Folded Plate," A. C. Scordelis, E. L. Croy, and I. R. Stubbs (Dec ST8:139:3023)

"Field Study of a Cellular Bulkhead," Ardis White, James A. Cheney, and C. Martin Duke (Aug SM4:89:2902)

"Jet Discharge into a Fluid with a Density Gradient," William E. Hart (Nov HY6:171:2996)

"Multiple Ribless Shells," Anton Tedesko (Oct ST7:107:2962)

"Multiple Soil Sampler," P. J. Parsons (Dec SM6:19:3012)

"Penstocks and Scroll Cases for Niagara Power Project," J. Edgar Revelle and John N. Pirok (Nov PO3:1:2979)

"Post-Elastic Behavior of Wide-Flange Steel Beams," Herbert A. Sawyer, Jr. (Dec ST8:43:3016)

"Reclaiming Hyperion Effluent," Finley B. Laverty, Ralph Stone, and Lawrence A. Meyerson (Nov SA6:1:2985)

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete," Albyn Mackintosh, Chrm (Dec ST8:87:3022)

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"Strength of Plate Girders in Shear," Konrad Basler (Oct ST7:151:2967)

"Strength of Plate Girders Under Combined Bending and Shear," Konrad Basler (Oct ST7:181:2968)

"Stresses in Ring Stiffeners in Cylinders," Wadi S. Rumman (Dec ST8:161:3024)

TIDES

"Non-Linear Tidal Flows and Electric Analogs," James A. Harder and Frank D. Masch, Jr. (Nov WW4:27:2988)

TORSION

"Torsional Behavior of Suspension Bridge Towers," Frank Baron and Anthony G. Arioto (Aug ST6:1:2879)

TOWERS

"Torsional Behavior of Suspension Bridge Towers," Frank Baron and Anthony G. Arioto (Aug ST6:1:2879)

TRAFFIC, AIRPORT

"Determining Airport Needs for the Future," George DeMent (with discussion), (Aug AT2:15:2890)

TRAFFIC, AIRPORT Continued

"Need for More Air Terminal Gates," Thomas M. Sullivan (Aug AT2:179:2897)

"New Development in Terminal Air Traffic Control," Walter N. Pike (with discussion), (Aug AT2:55:2890)

"Parking and Circulation of Vehicular Traffic at Airports," Israel Gilboa (Aug AT2:187:2897)

TRAFFIC, HIGHWAY AND ROAD

"Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)

"Parking and Circulation of Vehicular Traffic at Airports," Israel Gilboa (Aug AT2:187:2897)

TRANSPORTATION

"The Civil Engineer and Urban Transportation," Jack B. Blackburn (Sept HW3:1:2937)

"Integrated Parkway and Expressway Planning," D. Jackson Faustman (June HW2:1:2833)

"Observations on Urban Transportation," Luther Gulick (Sept CP1:1:2926)

TRIANGULATION

"Measurement of Displacement and Deformation by Geodetic Methods," F. Kobold (July SU2:37:2873)

TUNNELS

"Nuclear Power for the Arctic," William F. Reilly and John T. Rhett, Jr. (Mar CO1:63:2784)

TURBINES, WATER

"Fish Passage Through Hydraulic Turbines," Glenn H. Von Gunten (May HY3:59:2812)

"Observations on Urban Transportation," Luther Gulick (Sept CP1:1:2926)

"Studies for the Lower Monumental Power Plant," Benjamin F. Smith (July PO2:1:2847)

TURBULENCE

"Jet Discharge into a Fluid with a Density Gradient," William E. Hart (Nov HY6:171:2996)

"Terminal Shape of a Shallow Liquid Front," E. Roy Tinney and D. L. Bassett (Sept HY5:117:2934)

VALVES

"Hydraulic Design of Hollow-Jet Valve Stilling Basins," Glenn L. Beichley and Alvin J. Peterka (Sept HY5:1:2924)

"Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

VIBRATION

"Method of Internal Constraints and Its Application," Enrico Volterra (Aug EM4:103:2911)

"Vibration Analysis for Structural Floor Systems," Lawrence R. Burkhardt (Oct ST7:97:2958)

"Vibration of Shear Buildings by Flexibility Method," Ming L. Pei (Feb EM1:13:2728)

"Vibration Problems in Hydraulic Structures," Frank B. Campbell (Mar HY2:61:2772)

"Wind-Induced Vibrations in Antenna Members," William Weaver, Jr. (Feb EM1:141:2748)

WATER, CONSUMPTIVE USE OF

"Consumptive Use and Water Waste by Phreatophytes," Harry F. Blaney (Sept IR3:37:2929)

WATER, FLOW OF (General)

"Aquifer Tests on Partially Penetrating Wells," Mahdi S. Hantush (Sept HY5:171:2943)

"Development of a Variable Resistance Velocity Meter," Iury L. Maytin (Jan HY1:95:2713)

"Drawdown Around a Partially Penetrating Well," Mahdi S. Hantush (July HY4:83:2864)

"Free Streamline Theory of Segmental Jet Deflectors," E. Roy Tinney, Wilfred E. Barnes, Ottis W. Rechard, and Glenn R. Ingram (Sept HY5:135:2935)

"Free Surface Flow in Homogeneous Porous Medium," Roger De Wiest (July HY4:181:2871)

"Hydrodynamics of Flow into Curb-Opening Inlets," Richard J. Wasley (Aug EM4:1:2880)

"Hydrogeologic Nature of Streamflow on Small Watersheds," J. L. McGinness, L. L. Harrold and C. R. Amerman (Jan HY1:1:2700)

"Manifold Stilling Basin," Gene R. Fiala and Maurice L. Abertson (July HY4:55:2863)

"Prefabricated Reducers as Entrances for Pipe Culverts," H. G. Aronson (Mar HW1:1:2766)

"Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

"Variable Head Technique for Seepage Meters," Herman Bouwer (Mar IR1:31:2775)

WATER, FLOW OF, IN OPEN CHANNELS

- *Aerated Flow in Open Channels: Progress Report, Task Committee on Air Entrainment in Open Channels, Committee on Hydromechanics, Hydraulics Division," Norman H. Brooks, Chrm (May HY3:73:2814)
- *Calculation of Potential Flows with Free Streamlines," Garrett Birkhoff (Nov HY6:17:2977)
- *Dual Channel Stream Monitor," Susumu S. Karaki, Earl E. Gray, and Jack Collins (Nov HY6:1:2976)
- *End Depth at a Drop in Trapezoidal Channels," M. H. Diskin (July HY4:11:2851)
- *General Solution for Open Channel Profiles," James A. Liggett (Nov HY6:89:2983)
- *Interfacial Mixing in Stratified Flow," Enzo Oscar Macagno and Hunter Rouse (Oct EM5:55:2964)
- *Roughness Spacing in Rigid Open Channels," William W. Sayre and Maurice L. Albertson (May HY3:121:2823)
- *Stability of Alluvial Channels," Francis M. Henderson (Nov HY6:109:2984)
- *Study of Scour Around Spur-Dikes," R. J. Garde, K. Subramanya, and K. D. Nambudripad (Nov HY6:23:2978)
- *Terminal Shape of a Shallow Liquid Front," E. Roy Tinney and D. L. Bassett (Sept HY5:117:2934)
- *Two-Dimensional Flow with Corner Eddies," Aris C. Spengos (Apr EM2:17:2798)
- *Unification of Parshall Flume Data," Sydney Davis (Dec IR4:13:3006)
- *Uniform Flow in a Shallow, Triangular Open Channel," Richard J. Wasley (Sept HY5:149:2936)
- *Water Surface Profiles in Irregular Natural Streams," Praxitelis A. Argyropoulos (July HY4:1:2849)

WATER, FLOW OF, IN PIPES

- *Underground Outlet Works for Court-right and Wishon Dams," J. B. Cooke and J. E. Schumann (Jan HY1:27:2707)

WATER SUPPLY (General)

- *Coliform Organisms as an Index of Water Safety: Progress Report, Committee on Public Health Activities," Charles L. Senn, Chrm (Nov SA6:41:2986)
- *Cooling Pond Design in the Southwest," T. J. Cotter and A. W. Lotz (July PO2:85:2861)
- *Consumptive Use and Water Waste by Phreatophytes," Harry F. Blaney (Sept IR3:37:2929)

*Dissolved Solids Removal from Waste Water by Algae," Albert F. Bush, John D. Isherwood, and Shiva Rodgi (May SA3:39:2824)

*Effects of Hydrogen Sulfide on Concrete Structures," Bernal H. Swab (Sept SA5:1:2921)

*Irrigation and Drainage Studies of Texas Rivers," Rolland F. Kaser (Sept IR3:1:2923)

*Outlook for Economic Use of Fresh Water from the Sea," Samuel B. Morris (June IR2:15:2834)

*Water Table Fluctuations Induced by Irrigation," Marinus Maasland (June IR2:39:2837)

WATER TRANSPORTATION

- *Symposium on Grouting: Grouting to Prevent Vibration of Machinery," John P. Gnaedinger (Apr SM2:43:2793)

WATER TREATMENT

- *Leaching Requirements in Irrigation," Raymond A. Hill (Mar IR1:1:2757)
- *Upflow Solids Contact Basin," A. W. Bond (Nov SA6:73:3001)

WATERWAYS (General)

- *Bank and Levee Stabilization, Lower Colorado River," John S. McEwan (Nov WW4:17:2987)
- *Corrosion of Steel Piles in Salt Water," James R. Ayers and Ralph C. Stokes (Aug WW3:95:2886)
- *Deep Water Wave Generations by Moving Wind Systems," Basil W. Wilson (May WW2:113:2821)
- *Economic Evaluation of Inland Waterway Projects," Shu-t'ien Li and Eric E. Bottoms (Aug WW3:29:2876)
- *Economics of River Bank Stabilization," Charles Senour (May WW2:17:2809)
- *Eddy Forces on Rigid Cylinders," Alan D. K. Laird (Nov WW4:53:2991)
- *Hurricane Winds for Design Along the New England Coast," C. S. Gilman and V. A. Myers (May WW2:45:2813)
- *Land and Water Resource Planning in Texas," Charles D. Curran and Forney W. Fleming (Nov WW4:41:2989)
- *Latest Dredging Practice," Ole P. Erickson (Feb WW1:15:2729)
- *Operative Energy Concept in Marine Fendering," Shu-t'ien Li (Aug WW3:1:2875)
- *Stabilization of the Middle Rio Grande in New Mexico," Robert C. Woodson (Nov WW4:1:2980)

WATERWAYS (Geographical)

Columbia River

"Prototype Measurements of the Columbia River Estuary," John B. Lockett and Harold L. Kidby (Jan HY1:57:2710)

Russia

"Great Volga Waterway," Otakar W. Kabelac (Feb WW1:151:2749)

WAVES

"Attenuation of Stress Waves in Bilinear Materials," Richard Skalak and Paul Weidlinger (June EM3:1:2829)

"Behavior of Beach Fills in New England," Harry S. Perdakis (Feb WW1:75:2744)

"Deep Water Wave Generations by Moving Wind Systems," Basil W. Wilson (May WW2:113:2821)

"Design of Fox Point Hurricane Barrier," Roy S. Martin (Feb WW1:125:2747)

"Eddy Forces on Rigid Cylinders," Alan D. K. Laird (Nov WW4:53:2991)

"Groins on the Shores of the Great Lakes," Charles E. Lee (May WW2:89:2819)

"Impact Waves in Sand: Implications of an Elementary Theory," Blaine R. Parkin (Aug SM4:147:2912)

"Pneumatic Breakwaters to Protect Dredges," James L. Green (May WW2:67:2815)

"Some Aspects of Surface Water Wave Scale Effects," Gerrit Abraham (Jan HY1:41:2708)

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Dsc: John Parmakian (Sept HY5:217:2920) David W. Appel and Charles L. Sanford (Nov HY6:207:3000) H. L. Uppal (Nov HY6:212:3000) Jan-Inge Kveisengen (Nov HY6:221:3000) N. Rajaratnam (Nov HY6:224:3000) Mikio Hino (Nov HY6:231:3000)

CAMPBELL, LOUIS, JR.

"Aggregates and Fly-Ash Concrete for Barley Lock" (Mar CO1:1:2759)

CARLSON, EMERY D.

"Tank Foundations in Eastern Venezuela," with Stephen P. Fricano (Oct SM5:69:2966)

CAROTHERS, H. P.

"Design of Inlets for Texas Coastal Fisheries," with Homer C. Innis (Sept 60 WW3:103:2603)

Dsc: F. Gerritson (May WW2:165:2822)

Clo: Nov WW4:87:3004

CARTER, ROLLAND W.

See Jacob W. Davidian (Nov HY6:267:3000)

CASON, S. ROY

See Robert J. Hansen (Mar HW1:21:2789)

CEDERGREN, HARRY R.

"Seepage Requirements of Filters and Pervious Bases" (Oct 60 SM5:15:2623)

Dsc: W. J. Turnbull, Edward S. Barber (Feb SM1:77:2752) H. J. Gibbs (Apr SM2:171:2804)

Clo: Aug SM4:179:2917

Dsc (Dec SM6:77:3032) of "Uncertainties in Earth Dam Design" (June SM3:33:2832)

CHAN, C. K.

See D. H. Trollope (June SM3:111:2839)

See H. B. Seed (June SM3:107:2839)

CHANG, I. C.

See E. F. Masur (Aug EM4:19:2882)

CHAPLIN, T. K.

Dsc (Dec SM6:85:3032) of "Secondary Compression of Clays" (Aug SM4:61:2885)

CHAPPLE, MILTON A.

Dsc (Jan HY1:268:2724) of "Models Primarily Dependent on the Reynolds Number" (June 60 HY6:59:2531)

CHAPUS, E. E.

See M. H. Marty (May WW2:145:2822)

CHASE, E. SHERMAN

"Pollution of the Androscoggin River" (Mar SA2:9:2771)

CHELLIS, ROBERT D.

Dsc (Feb SM1:66:2574) with Arthur F. Zaskey of "Pile Driving Analysis by the Wave Equation" (Aug 60 SM4:55:2752)

CHENEY, JAMES A.

See Ardis White (Aug SM4:89:2902)

CHINN, JAMES

Dsc (Feb ST2:22:2754) of "Bar-Chain Method for Analyzing Truss Deformation" (May 60 ST5:69:2477)

Dsc (Feb ST2:39:2754) of "Various Instability Modes of the Fixed Base Column" (July 60 ST7:61:2544)

CHUN, ROBERT Y. D.

See Raymond C. Richter (Dec 59 IR2:85:2536)

CLARK, BRUCE E.

"Symposium on Grouting: Grouting at Fort Campbell Theatre Building" (Apr SM2:33:2792)

CLARK, J. W.

See J. R. Jombock (June ST5:17:2844)

CLAY, C. H.

Dsc (Nov PO3:121:2999) of "Model and Prototype Research on Fish Ladders" (July PO2:57:2856)

CLOUGH, RAY W.

"Dynamic Effects of Earthquakes" (Apr 60 ST4:49:2437)

Dsc: Clarence J. Derrick, G. W. Housner (Aug 60 ST8:103:107:2585)
A. A. Eremin (Oct 60 ST10:151:2635)
John A. Blume (Dec 60 ST12:123:2697)
Clo: June ST5:63:2846

Dsc (Mar ST3:59:2787) of "Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)

COLLINS, ARTHUR L.

Dsc (Feb WW1:15:2739) of "Latest Dredging Practice" (Nov WW4:93:3004)

COLLINS, JACK

See Susumu S. Karaki (Nov HY6:1:2976)

COMPTON, AUGUST W.

"Reinforced Concrete Pavements for Airports" (May 60 AT1:1:2460)

Dsc: Gordon K. Ray and William G. Westall (Mar AT1:35:2788)

CONRAD, HANS

See H. L. Sujata (June EM3:67:2842)

COOKE, J. B.

"Underground Outlet Works for Court-right and Wishon Dams" with J. E. Schumann (Jan HY1:27:2707)

COPEN, MERLIN D.

"Design of Arch Dams by Trial Load Method of Analysis" (Aug 60 PO4:13:2569)

Dsc: Adolf A. Meyer (Jan PO1:75:2723) G. S. Sarkaria, J. A. Veltrop (July PO2:113,116:2868)
Clo: Nov PO3:97:2999

CORNFIELD, G. M.

Dsc (Feb SM1:65:2752) of "Pile Driving Analysis by the Wave Equation" (Aug 60 SM4:55:2574)

COSTON, ROBERT

See Charles Culver (Feb ST2:1:2742)

COTTER, T. J.

"Cooling Pond Design in the Southwest," with A. W. Lotz (July PO2:85:2861)

CRAWFORD, RAYMOND R.

"Relationship of Compression Ratio to Gas Pipelines" (Sept PL2:11:2932)

CROWE, RAYMOND H.

Dsc (Feb PL1:69:2753) of "Regulation of Pipeline Design and Construction: Progress Report No. 2, Task Committee on Investigation of Problems Involved in Regulation of Pipeline Design and Construction by Various Governmental Agencies, Committee on Pipeline Planning Pipeline Division" (Oct 59 PL3:13:2204)

CROY, E. L.

See A. C. Scordelis (Dec ST8:139:3023)

CULBERTSON, J. K.

See C. F. Nordin, Jr. (Nov HY6:233:3000)

CULVER, CHARLES

"Tests of Composite Beams with Stud Shear Connectors," with Robert Coston (Feb ST2:1:2742)

CURRAN, CHARLES D.

"Land and Water Resource Planning in Texas," with Forney W. Fleming (Nov WW4:41:2989)

DANEL, P.

"Tetrapods and other Precast Blocks for Breakwaters," with E. Chapus and R. Dhaille (Sept 60 WW3:1:2590)

Dsc: Shoshichiro Nagai, A. S. Kahan (Feb WW1:179,182:2750) T. P. Anantram; Shri M. G. Hiranandani, C. V. Gole, and Y. D. Pendse (May WW2:151,151:2822)

DANIEL, I. M.

See A. J. Durelli (Dec ST12:93:2693)

DART, J. R.

Dsc of "Aircraft Runway Arresting Barriers" (Aug AT2:129:2897)

DA SILVEIRA, I.

See William Daniel Finn (Aug SM4:194:2917)

DAVENPORT, A. G.

Dsc (June ST5:99:2846) of "Static and Dynamic Analysis of Guy Cables" (Jan ST1:1:2703)

DAVIDIAN, JACOB W.

Dsc (Nov HY6:267:3000) with Rolland W. Carter of "Roughness Spacing in Rigid Open Channels" (May HY3:121:2823)

DAVIS, SYDNEY

"Unification of Parshall Flume Data"
(Dec IR4:13:3006)

DAVISSON, M. T.

Dsc (Feb EM1:171:2751) of "Experimental Study of Beams on Elastic Foundations" (June 60 EM3:107:2505)

DEAN, DONALD L.

"Static and Dynamic Analysis of Guy Cables" (Jan ST1:1:2703)
Dsc: Glen V. Berg (Apr ST4:61:2805)
A. G. Davenport (June ST5:99:2846) A. H. Brownfield, John H. Wells (Oct ST7:283,286:2974)
Corr: June ST5:109:2846

DEAN, R. G.

See P. S. Eagleson (Jan HY1:153:2724)

DEEN, ROBERT C.

See Milton E. Harr (Oct SM5:91:2971)

DELL, GEORGE H.

"Moments at Selected Points in Continuous Girders" (Dec ST8:193:3025)

DELLEUR, J. W.

"Variational Methods in Fluid Dynamics," with A. A. Sooky (Dec EM6:57:3018)
See P. F. Biery (Sept HY5:231:2920)

DEL VALLE-RIVERA, LUIS A.

See James M. Symons (Sept SA5:53:2942)

DE MENT, GEORGE

"Conference Remarks—Report of the AOC-ASCE Joint (May 1961) Conference Committee: Welcome" (Aug AT2:5:2889)

"Determining Airport Needs for the Future" (with discussion), (Aug AT2:15:2890)

DERRICK, CLARENCE J.

Dsc (Apr ST4:59:2805) of "Periods of Framed Buildings for Earthquake Analysis" (Dec 60 ST12:59:2680)

DE WIEST, ROGER

"Free Surface Flow in Homogeneous Porous Medium" (July HY4:181:2871)

DICK, T. M.

Dsc (May WW2:159:2822) of "Pneumatic Barrier Against Salt Water Intrusion" (Sept 60 WW3:49:2600)

DICKENS, H. B.

"Experience with a Pier-Supported Building over Permafrost," with D. M. Gray (Oct 60 SM5:1:2618)
Dsc: Edward F. Lobacz (June SM3:119:2839)
Clo: Dec SM6:51:3032

DICKINSON, MAURICE L.

Dsc (Feb EM1:179:2751) of "Arch Dam Analysis with an Electric Analog Computer" (Aug 60 EM4:127:2578)

DICKINSON, PHILIP F.

"Humid Zone Irrigation in Ceylon" (Dec 60 IR4:101:2682)
Dsc: M. M. Ismail (Sept IR3:83:2949)

DIETZ, ALBERT G. H.

"Ultrasonic Evaluation of Reinforced Plastics" (June EM3:31:2835)

DI MAGGIO, FRANK L.

"Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)
Dsc: Morris Ojalvo, F. T. Mavis (Feb ST2:61,64:2754) Roy W. Clough (Mar ST3:59:2787) A. R. Oliver, Alexis Ostapenko (Apr ST4:51,54:2805) Giuliano Augusti (June ST5:83:2846)

DISKIN, M. H.

"End Depth at a Drop in Trapezoidal Channels" (July HY4:11:2851)

DONNAN, WILLIAM H.

Dsc (June IR2:63:2840) of "Los Angeles Water Supply and Irrigation" (Dec 60 IR4:35:2671)

DONNAN, WILLIAM W.

"Field Measurement of Hydraulic Conductivity," with V. S. Aronovici (June IR2:1:2831)
See V. S. Aronovici (Sept IR3:87:2949)

DONNELL, L. H.

See E. F. Masur (Aug EM4:19:2882)

DOODY, J. J.

See W. G. Schulz (July PO2:29:2852)

DOUGAL, MERWIN D.

Dsc (Mar HY2:193:2781) of "Predicting Storm Runoff on Small Experimental Watersheds" (Aug 60 HY8:17:2577)

DOWNING, A. L.

See I. C. Hart (Mar SA2:59:2783)

DRAZIN, PHILIP G.

"Stability in a Continuously Stratified Fluid," with Louis N. Howard (Dec EM6:101:3026)

DUBERG, JOHN E.

"Method for Analysis of Multibeam Bridges," with Narbey Khachatryan and Raul E. Fradinger (July 60 ST7: 109:2552)

Dsc: A. S. Arya, A. R. Robinson (Feb ST2:43,50:2754)

Corr: Jan ST1:129:2725

Clo: Oct ST7:243:2974

DUGAN, HAROLD H., JR.

Dsc (Jan PO1:69:2723) of "Design of Self Supported Steel Transmission Towers" (June 60 PO3:55:2515)

DUKE, CHARLES M.

"Shoaling of the Lower Hudson River" (Feb WW1:29:2730)

DUKE, C. MARTIN

See Ardis White (Aug SM4:89:2902)

DUNHAM, JAMES W.

"Design Considerations for California Marinas" (Nov 60 WW4:69:2658)

Dsc: J. W. V. Blackman (May WW2: 179:2822) Omar J. Lillevang (Aug WW3: 135:2914)

DUNN, IRVING S.

"Tractive Resistance of Cohesive Channels" (June 59 SM3:1:2062)

Dsc: Frank D. Masch, Jr. (Apr 60 SM2:79:2459)

Clo: Feb SM1:43:2752

DUNSTAN, GILBERT H.

Dsc (Sept SA5:91:2918) of "Radiological Curricula for Sanitary Engineers" (Mar SA2:1:2767)

DURAN, RAMON

See Eldridge H. Lovelace (Dec 59 CP2:29:2307)

DURELLI, AUGUST J.

See C. A. Sciammerella (Feb EM1: 55:2736)

"Structural Model Analysis by Means of Moire Fringes," with I. M. Daniel (Dec 60 ST12:93:2693)

Dsc: D. H. Pletta and J. H. Sword (June ST5:95:2846)

Clo: Oct ST7:281:2974

DURKEE, JACKSON L.

Dsc (Oct ST7:271:2974) of "Movements of a Cable Due to Changes in Loading" (Dec 60 ST12:23:2674)

EAGLESON, P. S.

"Wave-Induced Motion of Bottom Sediment Particles," with R. G. Dean (Oct 59 HY10:53:2202)

Dsc: Robert L. Miller (May 60 HY5: 129:2489)

Clo: Jan HY1:153:2724

ECKENFELDER, WESLEY, JR.

"Trickling Filtration Design and Performance" (July SA4:33:2860)

EDBROOKE, ROBERT F.

See Richard D. Harza (Aug 60 PO4:31: 2579)

EDEN, EDWIN W., JR.

"Floods of the Florida Everglades" (June 59 HY6:43:2058)

Dsc: J. R. Bowman (Dec 59 HY12:121: 2271) Leo L. Burnet (Jan 60 HY1:95: 2349)

Clo: Aug 60 HY8:53:2587

Corr: Jan HY1:283:2724

EFSTRATIADIS, GREGORY

Dsc (Mar IR1:49:2786) of "Methods of Applying Irrigation Water" (Sept 60 IR3:71:2595)

EINSTEIN, H. A.

"An Electric Analog Model of a Tidal Estuary," with James A. Harder (Sept 59 WW3:153:2173)

Dsc: G. B. Fenwick (Mar 60 WW1: 161:2419)

Clo: Feb WW1:169:2750

"Estural Sediment Transport Patterns," with R. B. Krone (Mar HY2:51: 2770)

"Needs in Sedimentation" (Mar HY2: 1:2756)

Dsc: Paul F. Keim, Vito A. Vanoni (Sept HY5:215,216:2920)

Dsc (Jan HY1:219:2724) of "Resistance to Flow in Alluvial Channels" (May 60 HY5:73:2485)

ELDAR, JACOB

Dsc (Dec ST8:252:3029) of "Steel Frame Folded Roof" (June ST5:35:2845)

ELSTON, JUDSON P.

Dsc (Aug SM4:203:2917) of "Research in Foundation Grouting with Cement" (Apr SM2:55:2794)

Dsc (Aug SM4:197:2917) of "Grouting of Granular Materials" (Apr SM2:1: 2791)

Dsc (Aug SM4:199:2917) with I. Alpan of "Grouting to Prevent Vibration of Machinery Foundations" (Apr SM2:43: 2793)

Dsc (Aug SM4:205:2917) of "Investigation of Sand-Cement Grouts" (Apr SM2: 83:2795)

ELSTON, JUDSON P. Continued

Dsc (Dec SM6:67:3032) of "Symposium on Grouting: Grouting in Flowing Water and Stratified Deposits" (Apr SM2:125:2797)

Dsc (Dec SM6:61:3032) of "Symposium on Grouting: Construction on Rocky Reach Grouting Cutoff" (Apr SM2:95:2796)

ENGEL, F. V. A.

Dsc (July HY4:245:2872) of "Flume Studies of Flow in Steep, Rough Channels" (Nov 60 HY9:55:2653)

ENGLISH, J. MORLEY

Dsc (Oct ST7:247:2974) of "Shear Diaphragms of Light Gage Steel" (Nov ST11:111:2650)

EREMIN, A. A.

Dsc (Aug EM4:145:2916) of "Dynamic Elastic-Plastic Analysis of Structures" (Feb EM1:23:2731)

Dsc (Jan ST1:127:2725) of "Dynamic Response of Elasto-Plastic Frames" (July 60 ST7:81:2545)

Dsc (Feb SM1:60:2752) of "Foundation Vibrations" (Aug 60 SM4:1:2564)

Dsc (Apr ST4:47:2805) of "Long Span Prestressed Concrete Folded Plate Roofs" (Oct 60 ST10:87:2630)

Dsc (Apr SM2:177:2804) of "Mechanics of the Triaxial Test for Soils" (Oct 60 SM5:35:2625)

Dsc (June ST5:91:2846) of "Periods of Framed Buildings for Earthquake Analysis" (Dec 60 ST12:59:2680)

Dsc (Feb SM1:64:2752) of "Pile Driving Analysis by the Wave Equation" (Aug 60 SM4:55:2574)

Dsc (Oct ST7:310:2974) of "Recent Trends in Ultimate Strength Design" (Jan ST1:57:2715)

Dsc (Mar ST3:55:2787) of "Tests on a 120-ft Span Prestressed Concrete Beam" (Sept 60 ST9:1:2608)

ERICKSON, OLE P.

"Latest Dredging Practice" (Feb WW1:15:2739)

Dsc: Charles E. Behlke, John B. Herbich, Alf H. Sorensen (Aug WW3:139,142,144:2914) Arthur L. Collins (Nov WW4:93:3004)

Clo: Nov WW4:96:3004

ESCOBAR-FERNANDEZ, JULIO

Dsc (Mar 60 HY3:63:2426) of "Flood Control Aspects of Cauca Valley Development" (Sept 59,60 HY9:1:2147)

Corr: Jan HY1:283:2724

FADER, IRVING

"Grid Analysis by the Reaction Distribution Method" (Aug ST6:77:2879)

FADUM, R. E.

"Glossary of Terms and Definitions in Soil Mechanics: Report of the Committee on Glossary of Terms and Definitions in Soil Mechanics, Soil Mechanics and Foundations Division (1826 SM4)

Dsc: Edward S. Barber (1951 SM1)

John A. Focht, Jr., Bernt Jakobsen, R.

G. Ahlvin, Paul A. Parisi (2011 SM2)

R. F. Legget (2077 SM3)

Clo: June SM3:103:2839

FAIRBANKS, HARDY E.

"Elastomeric Pads as Bearings for Steel Beams" (Dec ST8:73:3021)

FAUSTMAN, D. JACKSON

"Integrated Parkway and Expressway Planning" (June HW2:1:2833)

FENNELL, EARLE J.

"Surveying and Mapping Division 1926-1960," Report of the Chairman, Executive Committee (July SU2:29:2859)

FENVES, STEVEN J.

Dsc (Apr ST4:67:2805) of "Analysis of Structures by Combining Redundants" (Jan ST1:41:2712)

FERGUSON, PHIL M.

"Recent Trends in Ultimate Strength Design" (Jan ST1:57:2715)

Dsc: Jack R. Benjamin (Apr ST4:71:

2805) C. Berwanger (June ST5:105:

2846) John G. Merkle, M. Gregory, A.

A. Eremim (Oct ST7:305,308,310:2974)

Corr: June ST5:109:2846

FERRELL, WILLIAM R., JR.

"Mountain Channel Treatment in Los Angeles County" (Nov 59 HY11:11:2242)

Dsc: George N. Newhall and Frank M. Henry (May 60 HY5:147:2489)

Clo: Jan HY1:165:2724

FIALA, GENE R.

"Manifold Stilling Basin," with Maurice L. Albertson (July HY4:55:2863)

FIERING, MYRON B.

"Queuing Theory and Simulation in Reservoir Design" (Nov HY6:39:2981)

FIESENHEISER, E. I.

Dsc (Oct ST7:323:2974) of "Steel Frame Folded Plate Roof" (June ST5:35:2845)

FINCH, D. M.

"Recent Developments in Airport Lighting" (Aug AT2:133:2897)

FINGER, JOSEPH H.

See Glenn B. Woodruff (Aug WW3:152:2914)

FINN, WILLIAM DANIEL

Dsc (Aug SM4:187:2917) with B. V. Ranganatham and I. da Silveira of "New Method of Consolidation-Coefficient Evaluation" (Feb SM1:29:2746)

FINZI, DANTE

"Underground Power Stations in Italy," with Mario Mainardis and Carlo Semenza (Dec 59 PO6:63:2289)

Dsc: Carlos S. Ospina (Apr 60 PO2:69:2457) F. L. Lawton (June 60 PO3:143:2537)

Clo: Jan PO1:49:2723

FISCHER, J. A.

See V. A. Smoots (Apr SM2:158:2804)

FISCHERSTROM, N. CLAES H.

"Low Pressure Aeration of Water and Sewage" (Sept 60 SA5:21:2607)

Dsc: Jerzy Ganczarzyk (Mar SA2:63:2783)

Clo: Sept SA5:77:2918

FISHER, ALFRED W.

Dsc (Jan SU1:47:2719) of "Self-Checking Method of Computing Curve Elevations" (Feb 60 SU1:1:2365)

FISHER, GORDON P.

"The Impact of Computers on Engineering Education" (Apr 60 ST4:1:2428)

Dsc: William A. Boe (Sept 60 ST9:31:2612) Francis E. Swain (Oct 60 ST10:147:2635) Warner Lansing (Nov 60 ST11:159:2667)

Clo: June ST5:61:2846

FISHER, JOHN W.

Dsc (Feb ST2:53:2754) with Ivan M. Viest of "Basis Column Strength" (July 60 ST7:139:2555)

FLACK, ERNEST

Dsc (Jan HY1:181:2724) of "Hood Inlet for Closed Conduit Spillways" (May 60 HY5:7:2478)

FLEMING, FORNEY W.

See Charles D. Curran (Nov WW4:41:2989)

FLEMING, JOHN F.

"Dynamic Response of Highway Bridges," with James P. Romualdi (Oct ST7:31:2955)

FLY, CLAUDE L.

"Soil Drainability Factor in Land Classification" (Sept IR3:47:2946)

FORREST, D. R.

"Navy's New Carrier Berthing Facilities at San Diego," with John B. Stetson (Nov WW4:69:2994)

FOSTER, C. R.

See W. Heukelom (Apr SM2:153:2804)

FRADINGER, RAUL E.

See John E. Duberg (July 60 ST7:109:2552)

FRANKIAN, R. T.

See G. S. Kovacs (Feb EM1:175:2751)

FRATAR, THOMAS J.

"Prediction of Maximum Practical Berth Occupancy," with Alvin S. Goodman and Austin E. Brant, Jr. (June 60 WW2:69:2517)

Dsc: Donald C. Hill (Nov 60 WW4:117:2659)

Clo: May WW2:149:2822

FREDERICK, DANIEL

Dsc (Apr EM2:89:2803) of "Elasto-Plastic Analysis by Numerical Procedures" (Dec 60 EM6:73:2690)

FREIBERG, S.

"Conjugate Beam Simulated by Electric Currents" (Aug EM4:91:2909)

Dsc: Campbell Massey (Dec EM6:187:3030)

FREITAG, DEAN R.

See James K. Mitchell (Apr SM2:149:2804)

FREUDENTHAL, A. M.

"Safety, Reliability, and Structural Design" (Mar ST3:1:2764)

Dsc: Jack R. Benjamin and Theodore C. Zsutty (Aug ST6:199:2915)

FRIBERG, BENGT F.

Dsc (June HW2:33:2841) of "LTS Design of Continuously Reinforced Concrete Pavement" (Dec 60 HW4:1:2677)

FRICANO, STEPHEN P.

See Emery D. Carlson (Oct SM5:69:2966)

FUKUTOME, ICHIRO

See Karl Moskowitz (Mar HW1:69:2782)

FULTON, ROBERT E.

Dsc (Dec SM6:69:3032) with A. J. Hendron, Jr. of "Impact Waves in Sand: Theory Compared with Experiments on Sand Columns" (June SM3:1:2828)

GALAL, HEND A.

See Carrell Morris (Jan SA1:81:2720)

GALAMBOS, THEODORE V.

"Influence of Partial Base Fixity on Frame Stability" (May 60 ST5:85:2480)

Dsc: Eugene Guillard (Oct 60 ST10:153:2635) Joseph W. Appeltauer and Thomas A. Barta (Feb ST2:29:2480)

Clo: June ST5:71:2846

Dsc (Dec ST8:241:3029) of "Strength and Design of Metal Beam-Columns" (Apr ST4:1:2802)

GANCZARCZYK, JERZY

Dsc (Mar SA2:63:2783) of "Low Pressure Aeration of Water and Sewage" (Sept 60 SA5:21:2607)

GARDE, R. J.

"Study of Scour Around Spur-Dikes" with K. Subramanya and K. D. Nam-budripad (Nov HY6:23:2978)

GARDEN, R. J. P.

Dsc (Oct 60 EM5:175:2632) of "Commentary on Plastic Design in Steel: Deflections: Progress Report No. 7, Joint WRC-ASCE Committee on Plasticity Related to Design, Engineering Mechanics Division" (Apr 60 EM2:141:2454)

Corr: June EM3:85:2842)

GARDNER, W. H., JR.

"Charts for Design of Reinforced Concrete Columns," with Donald H. Kline (May 60 ST5:1:2461)

Corr: Aug 60 ST8:115

Dsc: George B. Begg, Jr. (Aug 60 ST8:113:2585) James R. Krusling (Nov 60 ST11:165:2667)

Clo: Apr ST4:45:2805

GATES, R. F.

Dsc of "Recent Developments in Airport Lighting" (Aug AT2:153:2897)

GEDNEY, ROBERT H.

"Stilling Basin Damage at Chief Joseph Dam" (Mar HY2:97:2777)

GERRITSON, F.

Dsc (May WW2:165:2822) of "Design of Inlets for Texas Coastal Fisheries" (Sept 60 WW3:103:2603)

See Per Bruun (Feb WW1:173:2750)

GERSTLE, KURT H.

"Flow Graphs in Structural Analysis" (Oct 60 ST10:125:2634)

Dsc: H. L. Su (Apr ST4:49:2905)

Clo: Aug ST6:191:2915

See Peter P. Gillis (Jan ST1:41:2712)

GERSTNER, R. W.

See O. C. Zienkiewicz (Jan PO1:7:2714)

GHASWALA, S. K.

Dsc (June EM3:71:2842) of "Physical Metallurgy and Mechanical Properties of Materials: Fatigue of Structural Materials" (Dec 60 EM6:53:2688)

GIBBS, H. J.

Dsc (Apr SM2:171:2804) of "Seepage Requirements of Filters and Previous Bases" (Oct 60 SM5:15:2623)

GILCREAS, F. WELLINGTON

See John E. Kiker, Jr. (Mar SA2:1:2767)

GILLIS, PETER P.

"Analysis of Structures by Combining Redundants," with Kurt H. Gerstle (Jan ST1:41:2712)

Dsc: Steven J. Fenves (Apr ST4:67:2805) Harold G. Lorsch (June ST5:103:2846) B. J. Hartz, Phillip L. Gould (Oct ST7:293,295:2974)

GILMAN, C. S.

"Hurricane Winds for Design Along the New England Coast," with V. A. Myers (May WW2:45:2813)

GIRAND, JAMES

Dsc (May SA3:77:2826) of "Investigation of the Corrosive Behavior of Waters" (Nov 60 SA6:27:2657)

GLASSON, RALPH T.

"Trends in Aircraft Design Affecting the Airport," with Weldon E. Rhoades (with discussion), (Aug AT2:73:2890)

GNAEDINGER, JOHN P.

"Symposium on Grouting to Prevent Vibration of Machinery" (Apr SM2:43:2793)

Dsc: I. Alpan and Judson P. Elston (Aug SM4:199:2917)

- GOBLE, G. G.
Dsc (Dec ST8:251:3029) of "Steel Frame Folded Roof" (June ST5:35:2845)
- GOLD, L. W.
Dsc (Apr EM2:83:2803) of "Bearing Capacity of Floating Ice Sheets" (Oct 60 EM5:113:2627)
- GOLDBERG, JOHN E.
"Buckling of One-Story Frames and Buildings" (Oct 60 ST10:53:2629)
Corr: Jan ST1:129,130:2725
- GOLE, C. V.
See Shri M. G. Hiranandani (May WW2:151:2822)
- GOMEZ, AMALIO
"Cost Allocation of Water Projects in California" (Mar HY2:7:2760)
"Sacramento River Deep Water Ship Channel: Functional Planning" (Nov 60 WW4:53:2649)
Dsc: Blair T. Bower (May WW2:177:2822)
Clo: Nov WW4:91:3004
- GONDIKAS, P.
"Wind Stresses in Domes," with Mario G. Salvadori (Oct 60 EM5:13:2616)
Dsc: Gerrit H. Toebe (Apr EM2:75:2803)
Clo: Aug EM4:139:2916
- GOODMAN, ALVIN S.
See Thomas J. Frater (May WW2:149:2822)
- GOODRICH, R. D.
"Tolkmitt's Backwater and Dropdown Curve Tables" (May 60 HY5:1:2469)
Dsc: Ven Te Chow (Aug 60 HY8:73:2587) Praxitelis A. Argyropoulos (Nov 60 HY9:173:2665) Chesley M. Posey, Monir M. Kansoh, Serge Leliavsky (Jan HY1:169,172,180:2724)
- GOTAAS, HAROLD B.
Dsc (Mar SA2:55:2783) of "Light Conversion Efficiency of Algae Grown in Sewage" (July 60 SA4:71:2558)
- GOTOLSKI, WILLIAM H.
"High Temperature Effects on Bituminous Mixes" (Sept 60 HW3:1:2592)
Dsc: Bob M. Galiaway (Dec 60 HW4:59:2694) E. J. Woodward, Jr., Robert P. Lottman, F. N. Hveem, John L. McRae (Mar HW1:61,64,65,66:2782)
Clo: Sept HW3:29:2919
- GOULD, PHILLIP L.
Dsc (Oct ST7:295:2974) of "Analysis of Structures by Combining Redundants" (Jan ST1:41:2712)
Dsc: (Dec ST8:265:3029) of "Further Studies of the Strength of Beam-Columns" (Aug ST6:135:2879)
- GRAY, DON M.
"Synthetic Unit Hydrographs for Small Watersheds" (July HY4:33:2854)
- GRAY, EARL E.
See Susumu S. Karaki (Nov HY6:1:2976)
- GRAY, HAROLD FARNSWORTH
Dsc (Nov SA6:149:3003) of "Sanitary Engineering Comes of Age" (May SA3:1:2806)
- GREELEY, SAMUEL A.
"Storm Water and Combined Sewage Overflows," with Paul E. Langdon (Jan SA1:57:2718)
Dsc: H. G. Aronson (July SA4:87:2869)
- GREEN, JAMES L.
"Pneumatic Breakwaters to Protect Dredges" (May WW2:67:2815)
Dsc: J. B. Schijf (Nov WW4:127:3004)
- GREGORY, M.
Dsc (Aug ST6:197:2915) of "Lateral Inelastic Buckling of Tied Arches" (Jan ST1:23:2704)
Dsc (Oct ST7:308:2974) of "Recent Trends in Ultimate Strength Design" (Jan ST1:57:2715)
- GRIMES, PARKER R.
"Electronic Computer Use in Scoping Power Projects," with Glenn H. Von Gunten (Jan PO1:1:2709)
Dsc: George Bugliarello (July PO2:121:2868)
- GRINTER, L. E.
"Brittle Fractures Explained by Negative Residuals" (Apr EM2:25:2799)
"Importance of Emphasis in Civil Engineering Education" (Dec 58 PP1:1871)
Dsc: V. L. Streeter (May 59 PP1:33:2042)
Clo: Jap PP1:35:2722
- GRISE, R. H.
Dsc (Oct SM5:117:2972) of "Symposium on Grouting: Grouting of Granular Materials" (Mar SM2:1:2791)

- GROVER, HORACE J.
 "Physical Metallurgy and Mechanical Properties of Materials: Fatigue of Structural Materials" (Dec 60 EM6:53:2688)
 Dsc: S. K. Ghaswala (June EM3:71:2842)
- GRUMBLING, JAY S.
 See Clair N. Sawyer (May SA3:63:2826)
- GULICK, LUTHER
 "Observations on Urban Transportation" (Sept CP1:1:2926)
- GUTZWILLER, M. J.
 "Freezing and Thawing Effects on Prestressed Concrete," with F. E. Musleh (Oct 60 ST10:109:2633)
 Dsc: Walter E. Kunze (Mar ST3:57:2787)
 Clo: Aug ST6:189:2915
- HAAIJER, GEERHARD
 "Economy of High Strength Steel Structural Members" (Dec ST8:1:3010)
- HAFTERSON, HAROLD D.
 Dsc (Sept IR3:79:2949) of "Method for Estimating Consumptive Use of Water for Agriculture" (Dec IR4:45:2672)
- HALL, A. S.
 See T. Jumikis, II:345:3155
- HALL, JOHN R., JR.
 See John H. Schmertmann (Aug SM4:39:2881)
- HALL, WARREN A.
 "Aqueduct Capacity Under an Optimum Benefit Policy" (Sept IR3:1:2923)
- HALLMARK, DASEL E.
 Dsc (Jan HY1:234:2724) of "Resistance to Flow in Alluvial Channels" (May 60 HY5:73:2485)
- HAMON, W. RUSSELL
 "Estimating Potential Evapotranspiration" (May HY3:107:2817)
- HANSEN, E. A.
 "Studies of a Channel Through Padre Island, Texas" (Sept 60 WW3:63:2601)
 Dsc: Per Bruun (May WW2:161:2822)
- HANSEN, ROBERT J.
 "Earthwork Computations on Electronic Computers," with S. Roy Cason and Paul Yeager (Mar HW1:21:2789)
- HANTUSH, MAHDI S.
 "Aquifer Tests on Partially Penetrating Wells" (Sept HY5:171:2943)
 "Drawdown Around a Partially Penetrating Well" (July HY4:83:2864)
 Dsc (Dec IR4:79:3031) of "Intercepting Drainage Wells in Artesian Aquifer" (Mar IR1:7:2761)
- HAPP, STAFFORD C.
 Dsc (Aug SM4:183:2917) of "Tuttle Creek Dam of Rolled Shale and Dredged Sand" (Dec 60 SM6:11:2681)
- HARDER, JAMES A.
 "Non-Linear Tidal Flows and Electric Analogs," with Frank D. Masch, Jr. (Nov WW4:27:2988)
 See H. A. Einstein (Feb WW1:169:2750)
- HARDIN, BOBBY OTT
 Dsc (Apr SM2:157:2804) of "Foundation Vibrations" (Aug 60 SM4:1:2564)
- HARGREAVES, GEORGE H.
 Dsc (June IR2:67:2840) of "Method for Estimating Consumptive Use of Water for Agriculture" (Dec 60 IR4:45:2672)
- HARLAN, R. C.
 Dsc (Dec SM6:79:3032) of "Uncertainties in Earth Dam Design" (June SM3:33:2832)
- HARLEMAN, DONALD R. F.
 Dsc (Nov HY6:257:3000) with Ralph R. Rumer, Jr. of "Roughness Spacing in Rigid Open Channels" (May HY3:212:2823)
- HARR, MILTON E.
 "Analysis of Seepage Problems," with Robert C. Deen (Oct SM5:91:2971)
 Dsc (Jan HY1:275:2724) of "Unsteady Flow of Ground Water into a Surface Reservoir" (July 60 HY7:13:2551)
- HARROLD, LLOYD L.
 Dsc (Sept IR3:89:2949) of "Water Balance Recorder" (Mar IR1:15:2762)
 See J. L. McGuinness (Jan HY1:1:2700)
- HART, I. C.
 Dsc (Mar SA2:59:2783) of "Solubility of Atmospheric Oxygen in Water: Twenty-Ninth Progress Report, Committee on Sanitary Engineering Research, Sanitary Engineering Division" (July 60 SA4:41:2556)
 Dsc (Mar SA2:59:2783) with A. L. Downing of "Solubility of Atmospheric

- HART, I. C. Continued
Oxygen in Water: Twenty-Ninth Progress Report, Committee on Sanitary Engineering Research, Sanitary Engineering Division" (July 60 SA4:41:2556)
- HART, WILLIAM E.
"Jet Discharge into a Fluid with a Density Gradient" (Nov HY6:171:2996)
- HARTZ, B. J.
Dsc (Oct ST7:293:2974) of "Analysis of Structures by Combining Redundants" (Jan ST1:41:2712)
- HARZA, RICHARD D.
"Design of Karadj Hydroelectric Project," with Robert F. Edbrooke (Aug 60 PO4:31:2579)
Dsc: Robert Alexander (Nov PO3:103:2999)
- HASKER, J.
Dsc (Feb PL1:77:2753) of "Non-Steel Cylinder Prestressed Concrete Pipes" (Oct 59 PL3:29:2240)
- HASSAN, EL SAYED MOHAMED
"Power from the Sea" (July PO2:21:2850)
Dsc: George A. Whetstone (Nov PO3:115:2999)
- HAUSHILD, WILLIAM
"Unsteady Flow of Ground Water into a Surface Reservoir," with Gordon Kruse (July 60 HY7:13:2551)
Dsc: M. E. Harr, Raphael G. Kazman, W. T. Moody, K. T. Sundara Raja Iyengar (Jan HY1:275,276,277,280)
Clo: Sept HY5:211:2920
- HAYTHORNTHWAITE, R. M.
"Mechanics of the Triaxial Test for Soils" (Oct 60 SM5:35:2625)
Dsc: Laurits Bjerrum and Kwan Yee Lo; W. M. Kirkpatrick, A. A. Eremin, Andrew W. Jenike (Apr SM2:173,176,177:2804)
"Range of Yield Conditions in Ideal Plasticity" (Dec EM6:117:3027)
- HEDGES, CHARLES S.
Dsc (Dec SM6:82:3032) of "Uncertainties in Earth Dam Design" (June SM3:33:2832)
- HEER, EWALD
See Mario G. Salvadori (Dec ST12:59:2680)
- HENDERSON, FRANCIS M.
"Stability of Alluvial Channels" (Nov HY6:109:2984)
- HENDRON, A. J., JR.
See Robert E. Fulton (Dec SM6:69:3032)
- HERRBICH, JOHN B.
See Charles E. Behlke (Aug WW3:142:2914)
- HERMANDEZ, JOSE E.
See Ignacio Martin (Aug ST6:47:2879)
- HERMANN, EDWARD R.
Dsc (Jan SA1:75:2720) of "Light Conversion Efficiency of Algae Grown in Sewage" (July 60 SA4:71:2558)
- HERRING, FRANK W.
Dsc (Mar HW1:57:2782) of "Analyzing and Projecting Travel Data" (June 60 HW2:1:2513)
- HERRMANN, GEORGE
"Vibrations and Stability of Plates under Initial Stress," with Anthony E. Armenakas (June 60 EM3:65:2500)
Dsc: E. F. Masur (Dec 60 EM6:101:2691)
Clo: Aug EM4:133:2916)
- HERSHFIELD, DAVID M.
"Estimating the Probable Maximum Precipitation" (Sept HY5:99:2933)
- HEUKELOM, W.
"Dynamic Testing of Pavements," with C. R. Foster (Feb 60 SM1:1:2368)
Dsc: R. K. Bernhard, D. F. Coates (June 60 SM3:127,128:2538) A. A. Eremin (Aug 60 SM4:97:2586) O. M. Christof Ehrler (Oct 60 SM5:131:2636)
Clo: Apr SM2:153:2804
Add: Aug SM4:167:2917
- HICKERSON, T. F.
"Intersection of Straight Line with Spiral" (Feb 60 SU1:61:2379)
Corr: July 60 SU2:47
Dsc: Francis Bates (July 60 SU2:41:2560)
Clo: Jan SU1:49:2719)
- HICKSON, ROBERT E.
"Columbia River Ship Channel Improvement and Maintenance" (Aug WW3:71:2883)
- HILL, H. N.
"Design of Welded Aluminum Structures," with J. W. Clark and R. J. Brungraber (June 60 ST6:101:2528)

- HILL, H. N. Continued
 Dsc: Edward Luss (Apr ST4:37:2805)
 Clo: Dec ST8:233:3029
- HILL, RAYMOND A.
 "Leaching Requirements in Irrigation" (Mar IR1:1:2757)
 Dsc: V. S. Aronovici and W. W. Donnan (Sept IR3:87:2949)
 Dsc (June EM3:59:2842) of "Arch Dam Analysis with an Electric Analog Computer" (Aug 60 EM4:127:2578)
- HIRANANDANI, SHRI M. G.
 Dsc (May WW2:151:2822) with C. V. Gole and Y. D. Pendse of "Tetrapods and Other Precast Blocks for Breakwaters" (Sept 60 WW3:1:2590)
- HOFFMAN, LEWIS E.
 "Regulation of Pipeline Design and Construction: Progress Report No. 2, Task Committee on Investigation of Problems Involved in Regulation of Pipeline Design and Construction by Various Governmental Agencies, Committee on Pipeline Planning, Pipeline Division" (Oct 59 PL3:13:2204)
 Dsc: Raymond H. Crowe, Steve R. Sawyer, John Randall (Feb PL1:69:2753)
- HOLLICK, ROBERT E.
 Dsc (Jan PO1:67:2723) of "Design of Self Supported Steel Transmission Towers" (June 60 PO3:55:2515)
- HOMER, W. A.
 See V. J. Calise (May SA3:61:2826)
- HONDROS, G.
 "Load Distribution in Composite Girder-Slab Systems," with J. G. Marsh (Nov 60 ST11:79:2645)
 Corr: Mar ST3:67:2787
- HOPKINS, H. G.
 Dsc (Feb EM1:185:2751) of "Bearing Capacity of Floating Ice Sheets" (Oct 60 EM5:113:2627)
 Dsc (Dec SM6:69:3032) of "Impact Waves in Sand: Theory Compared with Experiments on Sand Columns (June SM3:1:2828)
- HORN, JOHN A.
 "Computer Analysis of Slope Stability" (June SM3:1:2501)
 Corr: Oct SM5:141
 Dsc: Bobby Ott Hardin (Oct SM5:137:2636) A. L. Little, N. R. Morgenstern, and V. E. Price (Dec SM6:95:2696)
 Clo: Apr SM2:155:2804
- HORONJEFF, ROBERT
 "Conference Remarks—Report of the AOC-ASCE Joint (May 1961) Conference Committee: Introduction" (Aug AT2:3:2889)
 "Location and Number of Exit Taxiways" (with discussion), (Aug AT2:99:2897)
- HORTON, CARTER HALE
 "Steel Pile Marine Corrosion and Cathodic Protection" (Aug WW3:59:2877)
- HOWARD, LOUIS N.
 See Philip G. Drazin (Dec EM6:101:3026)
- HOYT, WILLIAM G.
 Dsc (June 60 HY6:117:2535) of "Early History of Hydrometry in the United States" (Jan 60 HY1:1:2335)
 Corr: Jan HY1:283:2724
- HSU, H. Y.
 See E. Roy Tinney (May HY3:1:2808)
- HUBBARD, S. R.
 "Non-Steel Cylinder Prestressed Concrete Pipes" (Oct 59 PL3:29:2240)
 Dsc: J. Hasker (Feb PL1:77:2753)
 Clo: Sept PL2:55:2944
- HULL, C. H. J.
 Dsc (Nov SA6:105:2666) of "Oxygen Balance of an Estuary" (May SA3:35:2472)
 Corr: Mar SA2:69:2783
- HUME, N. B.
 See R. J. Theroux (Mar SA2:21:2778)
- HUMPHREYS, HAROLD W.
 Dsc (Jan HY1:183:2724) of "Hood Inlet for Closed Conduit Spillways" (May 60 HY5:7:2478)
- HUNI, EMILE
 Dsc (Dec SM6:53:3032) of "Symposium on Grouting: Grouting of Granular Materials" (Apr SM2:1:2791)
- HURTY, WALTER C.
 See Moshe F. Rubinstein (Dec EM6:135:3028)
- HVEEM, F. N.
 Dsc (Mar HW1:65:2782) of "High Temperature Effects on Bituminous Mixes" (Sept 60 HW3:1:2592)

HWANG, SHOI-YEAN

See Hsin-Kuan Liu (Nov 59 HY11:65:2260)
Clo: July HY4:223:2872

INDRI, EGIDIO

Dsc of "Drag and Lift on Spheres within Cylindrical Tubes" I;1247:3231

INGLIS, CLAUDE

Dsc (Jan HY1:212:2724) of "Uniform Water Conveyance Channels in Alluvial Material" (May 60 HY5:33:2484)

INGRAM, GLENN R.

See E. Roy Tinney (Sept HY5:135:2935)

IPPEN, ARTHUR T.

"Research and the Professional Society" (Oct PP2:35:2952)

IRDI, EGIDIO

Dsc (Jan HY1:265:2724) of "Drag and Lift on Spheres Within Cylindrical Tubes" (June 60 HY6:47:2526)

ISHERWOOD, JOHN D.

See Albert F. Bush (May SA3:39:2824)

ISMAIL, M. M.

Dsc (Sept IR3:83:2949) of "Humid Zone Irrigation in Ceylon" (Dec 60 IR4:101:2682)

IVES, KENNETH J.

"Filtration Using Radioactive Algae" (May SA3:23:2820)

Dsc (Nov SA6:151:3003) of "Sanitary Engineering Education in a Changing World" (July SA4:47:2862)

IYENGAR, K. T. SUNDARA RAJA

Dsc (Jan HY1:280:2724) of "Unsteady Flow of Ground Water into a Surface Reservoir" (July 60 HY7:13:2551)

JAEGER, CHARLES

Dsc (July PO2:123:2868) of "Stress Analysis and Special Problems of Prestressed Dams" (Jan PO1:7:2714)

JAMES, L. B.

See M. J. Shelton (May 59 PL2:1:2023)

JANISZEWSKI, TADEUSZ

Dsc (June ST5:89:2846) of "Movements of a Cable Due to Changes in Loading" (Dec 60 ST12:23:2674)

Dsc (Mar ST3:49:2787) with Blair Birdsall of "Secondary Stresses in Parallel Wire Suspension Cables" (July 60 ST7:37:2542)

JENCKS, CARLTON E.

See David M. Rockwood (Mar HY2:121:2780)

JENIKE, ANDREW W.

Dsc (Apr SM2:177:2804) of "Mechanics of the Triaxial Test for Soils" (Oct 60 SM5:35:2625)

JENSEN, WILLARD C.

"Timber Piles in Permafrost at Alaskan Radar Station" (Feb SM1:15:2734)

JOHNSON, J. W.

"The Supply and Loss of Sand to the Coast" (Sept 59 WW3:227:2177)

Dsc: P. S. Eagleson and R. G. Dean (June 60 WW2:125:2540)

Clo: Feb WW1:171:2750

JOHNSON, REUBEN J.

"Small-Boat Harbor Development on the Pacific Coast" (Feb WW1:1:2726)

JOHNSTON, BRUCE G.

"Buckling Behavior Above the Tangent Modulus Load" (Dec EM6:79:3019)

"Digest of the Guide to Design Criteria for Metal Compression Members" (Apr 60 ST4:157:2450)

Dsc: H. J. Pian (July 60 ST7:221:2563)

Clo: June ST5:87:2846

JOMBOCK, J. R.

"Postbuckling Behavior of Flat Plates," with J. W. Clark (June ST5:17:2844)

JONAS, E.

Dsc (Feb SM1:63:2752) of "Pile Driving Analysis by the Wave Equation" (Aug 60 SM4:35:2574)

JONES, BEN A., JR.

See Robert L. McFall (Mar HY2:196:2781)

JONES, KEITH

"Restraint of Structures Attached to Mass Concrete" (Dec ST8:25:3014)

JOPLING, ALAN V.

Dsc (Nov HY6:238:3000) of "Forms of Roughness in Alluvial Channels" (May HY3:87:2816)

JUDD, SAMUEL

"Glen Canyon Powerplant" (July PO2: 41:2855)

KABELAC, OTAKAR W.

"Great Volga Waterway" (Feb WW1: 151:2749)

Dsc: Roy F. Bessey (May WW2: 185: 2822)

Clo: Nov WW4: 107:3004

KAHAN, A. S.

Dsc (Feb WW1: 182:2750) of "Tetrapods and Other Precast Blocks for Breakwaters" (Sept 60 WW3: 1:2590)

KAIBUCHI, YONOSUKE

"Research on Composting of City Refuse and Nightsoil" (Nov SA6: 101:3002)

KALDJIAN, MOVSES J.

"Prestressed Bowstring Arch" (Oct ST7: 1:2953)

KALKANIS, G.

Dsc (Jan HY1: 198:2724) of "Uniform Water Conveyance Channels in Alluvial Material" (May 60 HY5: 33:2484)

KANSOH, MONIR M.

Dsc (Jan HY1: 172:2724) of "Tolkmitt's Backwater and Dropdown Curve Tables" (May 60 HY5: 1:2469)

Dsc (Mar HY2: 171:2781) of "Uniform Water Conveyance Channels in Alluvial Material" (May 60 HY5: 33:2484)

KAO, J. S.

See S. L. Lee (Apr EM2: 55:2801)

KARAKI, SUSUMU S.

"Dual Channel Stream Monitor," with Earl E. Gray and Jack Collins (Nov HY6: 1:2976)

KAROL, R. H.

"Symposium on Grouting: Grouting in Flowing Water and Stratified Deposits," with A. M. Swift (Apr SM2: 125:2797)

Dsc: Judson P. Elston (Dec SM6: 67: 3032)

KASER, ROLLAND F.

"Irrigation and Drainage Studies of Texas Rivers" (Sept IR3: 13:2928)

KATTERHENRY, ARNOLD A.

"Highway and Bridge Surveys: Analytic Geometry in Highway Design and Layout: Progress Report, Committee on Engineering Surveys, Surveying and Mapping Division" (July 60 SU2: 1:2548)
Corr: Jan SU1: 51:2719

KAUFMAN, M. W.

Dsc (Feb ST2: 67:2754) of "Tentative Recommendations for the Design and Construction of Composite Beams and Girders for Buildings: Progress Report, Joint ASCE-ACI Committee on Composite Construction, Structural Division" (Dec 60 ST12: 73:2692)
Corr: June ST5: 109:2846

KAZMAN, RAPHAEL G.

Dsc (Jan HY1: 276:2724) of "Unsteady Flow of Ground Water into a Surface Reservoir" (July 60 HY7: 13:2551)

KEE, CHIN FUNG

"Lateral Inelastic Buckling of Tied Arches" (Jan ST1: 23:2704)

Dsc: M. Gregory (Aug ST6: 197:2915)

KEFFER, J. F.

See W. D. Baines (July HY4: 263:2872)

KEIM, PAUL F.

Dsc (Sept HY5: 215:2920) of "Needs in Sedimentation" (Mar HY2: 1:2756)

KENNEDY, JOHN F.

Dsc (Jan HY1: 203:2724) of "Uniform Water Conveyance Channels in Alluvial Material" (May 60 HY5: 33:2484)

See Vito A. Vanoni (Nov HY6: 241:3000)

KENNEDY, THOMAS B.

"Symposium on Grouting: Research in Foundation Grouting with Cement" (Apr SM2: 55:2794)

Dsc: Judson P. Elston (Aug SM4: 203: 2917) Robert E. White (Dec SM6: 57: 3032)

KERR, ARNOLD D.

"Viscoelastic Winkler Foundation with Shear Interaction" (June EM3: 13:2830)

KERRI, KENNETH D.

Dsc (Nov SA6: 150:3003) of "Sanitary Engineering Comes of Age" (May SA3: 1:2806)

KETTER, ROBERT L.

"Further Studies of the Strength of Beam-Columns" (Aug ST6: 135:2879)

Dsc: Philip L. Gould (Dec ST8: 265: 3029) Morris Ojalvo (Dec ST8: 266:3029)

KHACHATURIAN, NARBAY

See John E. Duberg (July 60 ST7: 109: 2552)

KIDBY, HAROLD A.

See John B. Lockett (Jan HY1: 57:2710)

KIKER, JOHN E., JR.

"Radiological Curricula for Sanitary Engineers," with F. Wellington Gilcreas (Mar SA2:1:2767)

Dsc: Gilbert H. Dunstan (Sept SA5: 91:2918) E. J. Kilcawley (Nov SA6:145: 3003) George B. Morgan (Nov SA6:147: 3003)

KILCAWLEY, E. J.

Dsc (Nov SA6:145:3003) of "Radiological Curricula for Sanitary Engineers" (Mar SA2:1:2767)

KING, JOHN C.

"Symposium on Grouting: Grouting of Granular Materials," with Edward G. W. Bush (Apr SM2:1:2791)

Dsc: Judson P. Elston (Aug SM4:197: 2917) R. H. Grise (Oct SM5:117:2972) Emile Huni (Dec SM6:53:3032) John E. Wagner (Dec SM6:55:3032)

KIRKPATRICK, W. M.

Dsc (Apr SM2:176:2804) of "Mechanics of the Triaxial Test for Soils" (Oct 60 SM5:35:2625)

KIRPICH, PHILIP Z.

"Flood Control Aspects of Cauca Valley Development," with Carlos S. Ospina (Sept 59 HY9:1:2147)

Dsc: Gordon R. Williams (Feb 60 HY2:123:2381) Julio Escobar-Fernandez (Mar 60 HY3:63:2426)

Clo: Jan HY1:131:2724

KLINE, DONALD H.

See W. H. Gardner, Jr. (Apr ST4:45: 2805)

KLOHN, EARLE J.

"Pile Heave and Redriving" (Aug SM4: 125:2905)

Dsc: Stephen M. Olko (Dec SM6:87: 3032)

KOBOLD, F.

"Measurement of Displacement and Deformation by Geodetic Methods" (July SU2:37:2873)

KOLF, R. C.

"Vector Aspects of Dynamic Similarity," with W. L. Reitmeyer (Mar HY2: 19:2763)

Dsc: W. D. Baines and J. F. Keffer (July HY4:263:2872) Charles E. Behlke, James R. Steven (Sept HY5:219,222: 2920)

"The Vortex Chamber as an Automatic Flow Control Device," with P. B. Zielinski (Dec 59 HY12:1:2310)

Dsc: Michael Amein (Mar 60 HY3:85: 2426) John C. Stevens (June 60 HY6: 107:2535)

Clo: Jan HY1:167:2724

Dsc (Jan HY1:269:2724) with W. L. Meyer of "Models Primarily Dependent on the Reynolds Number" (June 60 HY6: 59:2531)

KOLOSEUS, HERMAN J.

Dsc (July HY4:250:2872) of "Flume Studies of Flow in Steep, Rough Channels" (Nov 60 HY9:55:2653)

KOLUPAILA, STEPONAS

"Early History of Hydrometry in the United States" (Jan 60 HY1:1:2335)

Dsc: J. W. Johnson (Apr 60 HY4:131: 2456) William G. Hoyt, E. Shaw Cole (June 60 HY6:117,118:2535) Murray Blanchard, Arthur H. Frazier, J. C. Stevens (July 60 HY7:33,35:2562) Ivan J. Moskvitinoff (Nov 60 HY9:125:2665)

Clo: May HY3:175:2827

Dsc (Nov HY6:271:3000) of "Water Surface Profiles in Irregular Natural Streams" (July HY4:1:2849)

KOVACS, G. S.

Dsc (Feb EM1:175:2751) with R. T. Frankian of "Underground Structures Subject to Air Overpressure" (Aug 60 EM4:87:2575)

KOWTKO, DONALD

"Meaning of the Professional License to Engineers" (Jan PPI:9:2699)

KRAMER, J. M.

See R. N. Bergstrom (July PO2:107: 2868)

KRAMRISCH, FRITZ

"Simplified Design of Combined Footings," with Paul Rogers (Oct SM5:19: 2959)

KRISTENSEN, KNUD J.

See Hans C. Aslyng (Mar IR1:15:2762)

KRIZ, LADISLAV B.

"Ultimate Strength of Over-Reinforced Beams," with Seng-Lip Lee (June 60 EM3:95:2502)

Dsc: Iqbal Ali (Dec 60 EM6:107:2691)

Clo: Aug EM4:135:2916

KRONE, R. B.

See H. A. Einstein (Mar HY2:51:2770)

KRUSE, GORDON

See William Haushild (July 60 HY7:13: 2551)

KUESEL, THOMAS R.

Dsc (Dec ST8:259:3029) of "Torsional Behavior of Suspension Bridge Towers" (Aug ST6:1:2879)

KUNZE, WALTER E.

Dsc (Mar ST3:57:2787) of "Freezing and Thawing Effects on Prestressed Concrete" (Oct 60 ST10:109:2633)

KUO, SHAN S.

Dsc (Aug EM4:143:2916) of "Vibration of Shear Buildings by Flexibility Method" (Feb EM1:13:2728)

KUSCHE, RAY O.

"Importance of Regional Airport System Planning" (with discussion), (Aug AT2:21:2890)

LACEY, GERALD

Dsc (Jan HY1:187:2724) of "Uniform Water Conveyance Channels in Alluvial Material" (May 60 HY5:33:2484)

LAIRD, ALAN D. K.

"Eddy Forces on Rigid Cylinders" (Nov WW4:53:2991)

"Water Eddy Forces on Oscillating Cylinders," with Charles A. Johnson and Robert W. Walker (Nov 60 HY9:43:2652)

Dsc: Donald VanSickle (May HY3:201:2827) Phillip R. Smith (July HY4:243:2872)

LAMONT, CHARLES M.

"Self-Checking Method of Computing Curve Elevations" (Feb 60 SU1:1:2365)

Dsc: T. F. Hickerson (July 60 SU2:34:2560) Alfred W. Fisher (Jan SU1:47:2719)

LANE, K. S.

"Tuttle Creek Dam of Rolled Shale and Dredged Sand," with R. G. Fehrman (Dec 60 SM6:11:2681)

Dsc: Stafford C. Happ (Aug SM4:183:2917)

LANGBEIN, W. B.

See Thomas Massock, Jr. (Jan HY1:237:2724)

LANGDON, PAUL E.

See Samuel A. Greeley (Jan SA1:57:2718)

LA POINTE, J. R.

"Waste Treatment at the Shipping Port Reactor," with W. J. Hahn and E. D. Harward, Jr. (May 60 SA3:129:2481)

Dsc: Conrad P. Straub and Vincent J.

Sodd (Jan SA1:71:2720)

Corr: Jan SA1:87:2720

LARA, JOE M.

"Revised Computation of a Velocity Head Weighted Value," with K. B.

Schroeder (Sept 59 HY9:69:2149)

Dsc: Manuel A. Benson, Marcel Bitoun (Feb HY2:127,129:2381) Steponas Kolu-paila, Israel H. Steinberg, William C. Peterson (Mar 60 HY3:75,77:2426)

Clo: Jan HY1:135:2724

"Two Methods to Compute Water Surface Profiles," with Kenneth B. Schroeder (Apr 59 HY4:79:1997)

Dsc: Bernard L. Golding (June HY6:79:2076) T. R. Anand (Aug 59 HY8:123:2138) R. Silvester (Sept 59 HY9:163:2182) William C. Peterson (Nov 59 HY11:137:2269) S. V. Chitale and K. Arunachalam, F. Paderi (Aug HY8:41,47:2587) Edward N. Whitney (Sept HY5:199:2920)

Clo: Aug HY8:49:2587

Add: Sept HY5:200:2920

LARSEN, IAN

"Pneumatic Barrier Against Salt Water Intrusion" (Sept 60 WW3:49:2600)

Dsc: T. M. Dick (May WW2:159:2822)

Clo: Nov WW4:85:3004

LAURSEN, EMMETT M.

"Scour at Bridge Crossings" (Feb 60 HY2:39:2369)

Corr: June 60 HY6:121

Dsc: T. Blench (May 60 HY5:193:2489) Joseph N. Bradley (Aug 60 HY8:69:2587) D. V. Joglekar, W. J. Bauer, L. J. Mushtaq Ahmad, Pier Luigi Romita (Nov 60 HY9:129,132,134,137,142,144,151:2665)

Clo: July HY4:231:2872

Dsc (Jan HY1:263:2724) of "Drag and Lift on Spheres Within Cylindrical Tubes" (June 60 HY6:47:2526)

Dsc (Jan HY1:228:2724) with Gerald A. Zernial of "Resistance to Flow in Alluvial Channels" (May 60 HY5:73:2485)

LAVERTY, FINLEY B.

"Reclaiming Hyperion Effluent," with Ralph Stone and Lawrence A. Meyerson (Nov SA6:1:2985)

LAWRANCE, CHARLES H.

"Sanitary Considerations of Five-Mile Ocean Outfall" (July SA4:1:2858)

See R. J. Theroux (Mar SA2:21:2778)

LECHT, CHARLES

See Melvin L. Baron (Oct EM5:33:2961)

LEDBETTER, WILLIAM B.

See Benjamin F. McCullough (Dec HW4:1:2677)

LEDERER, JEROME

"Conference Remarks: Report of the AOC-ASCE Joint (May 1961) Conference Committee: Airport Capacity and Safety" (Aug AT2:7:2889)

LEE, CHARLES E.

"Groins on the Shores of the Great Lakes" (May WW2:89:2819)

Dsc: A. C. Rayner and R. L. Rector (Nov WW4:137:3004)

Dsc (Feb WW1:175:2750) of "Breakwaters in the Hawaiian Islands" (June 60 WW2:39:2507)

LEE, CHARLES H.

"Friant-San Joaquin River Litigation" (Dec IR4:27:3007)

Dsc (June IR2:64:2840) of "Los Angeles Water Supply and Irrigation" (Dec 60 IR4:35:2671)

LEE, IAN K.

See D. Hugh Trollope (Nov PO3:107:2999)

LEE, SENG-LIP

"Bar-Chain Method for Analyzing Truss Deformation," with P. C. Patel (May 60 ST5:69:2477)

Dsc: Chun-Yeh Liu, James Chinn (Feb ST2:21,22:2754)

Clo: Dec ST8:231:3029

"Continuous Beam-Columns on Elastic Foundation," with T. M. Wang and J. S. Kao (Apr EM2:55:2801)

Dsc: Le-Wu Lu (Aug EM4:149:2916)

Clo: Dec EM6:183:3030

"Vierendeel Bents with Nonprismatic Members," with F. P. Weisinger (Dec 59 ST10:55:2321)

Dsc: Paul Rogers (May 60 ST5:139:2491)

Clo: Jan ST1:115:2725

See Ladislav B. Kriz (Aug EM4:135:2916)

LEIMDORFER, P.

Dsc (Nov WW4:101:3004) of "Marine Oil Terminal for Rio de Janeiro, Brazil" (Feb WW1:47:2733)

LELIAVSKY, SERGE

Dsc (Jan HY1:172:2724) of "Tolkmitt's Backwater and Dropdown Curve Tables" (May 60 HY5:1:2469)

LE MEHAUTE, BERNARD

"Theory of Wave Agitation in a Harbor" (Mar HY2:31:2765)

LESTER, M. D.

Dsc (Nov HY6:273:3000) of "Continuous Parabolic Interpolation" (July HY4:99:2965)

LEWIS, WAYNE C.

"Design Considerations for Fatigue in Timber Structures" (May 60 ST5:15:2470)

Dsc: Paul G. Fluck, Floyd E. Schneider (Nov 60 ST11:167:2667)

Clo: June ST5:69:2846

LI, SHU-T'IEN

"Economic Evaluation of Inland Waterway Projects," with Eric E. Bottoms (Aug WW3:29:2876)

"Operative Energy Concept in Marine Fendering" (Aug WW3:1:2875)

Dsc (July SU2:69:2870) of "Surveys for the Lake Ponchartrain Bridge" (Jan SU1:1:2702)

LIESSNER, W. C.

See D. H. Pletta (Aug EM4:49:2887)

LIGGETT, JAMES A.

"General Solution for Open Channel Profiles" (Nov HY6:89:2983)

Dsc (Dec EM6:185:3030) of "Hydrodynamics of Flow into Curb-Opening Inlets" (Aug EM4:1:2880)

LILLEVANG, OMAR J.

"Mean Direction of Waves and of Wave Energy" (Mar 60 WW1:123:2423)

Dsc: J. W. Dunham, Per Bruun, J. M. Jordaan, Jr. (Sept 60 WW3:173,175,176:2611)

Clo: Aug WW2:133:2914

Dsc (Aug WW3:135:2914) of "Design Considerations for California Marinas" (Nov 60 WW4:69:2658)

LIND, N. C.

Dsc (Apr EM2:87:2803) with D. T. Wright of "Bearing Capacity of Floating Ice Sheets" (Oct 60 EM5:113:2627)

LIU, HSIN-KUAN

"Discharge Formula for Straight Alluvial Channels," with Shoi-Yean Hwang (Nov 59 HY11:65:2260)

Dsc: T. Blench (Feb 60 HY2:131:2381)

G. H. Lean, Lucien M. Brush, Jr., Don M. Culbertson and Paul R. Jordan, Bruce R. Colby (May 60 HY5:167,168,171,174:2489) C. Blanchet, D. R. Dawdy and R. W. Carter, M. Gamal Mostafa, James K. Culbertson and Carl F.

LIU, HSIN-KUAN Continued

Nordin, Jr. (June 60 HY6:91,93,96,98:2535) R. J. Garde, John L. Bogardi (July 60 HY7:21,26:2562)
Clo: See Shoi-Yean Hwang (July HY4:223:2872)

LIU, CHUN-YEH

Dsc (Feb ST2:21:2754) of "Bar-Chain Method for Analyzing Truss Deformation" (May 60 ST5:69:2477)

LIVINGSTON, CLIFTON W.

"Fundamentals of Arctic Blasting" (Feb 60 CO1:1:2355)
Corr: Mar CO1:91:2785

LO, KWAN YEE

"Secondary Compression of Clays" (Aug SM4:61:2885)

Dsc: T. K. Chaplin (Dec SM6:85:3032)

Dsc (June SM3:127:2839) of "New Method of Consolidation-Coefficient Evaluation" (Feb SM1:29:2746)

See Laurits Bjerrum (Apr SM2:173:2804)

LOBACZ, EDWARD F.

Dsc (June SM3:119:2839) of "Experience with a Pier-Supported Building over Permafrost" (Oct 60 SM5:1:2618)

LOBDELL, HERBERT L.

"Rate of Constructing Embankments on Soft Foundation Soils" (Oct 59 SM5:61:2214)

Dsc: W. H. Gotolski (Feb 60 SM1:93:2391) Harry R. Cedergren, F. P. Silva, O. H. Gilbert, Jr. (June 60 SM3:69,72,75:2538)

Clo: Feb SM1:45:2752

LOCKETT, JOHN B.

"Prototype Measurements of the Columbia River Estuary," with Harold A. Kidby (Jan HY1:57:2710)

LORSCH, HAROLD G.

Dsc (June ST5:103:2846) of "Analysis of Structures by Combining Redundants" (Jan ST1:41:2712)

Dsc (July HY4:253:2872) of "Frequency of Natural Events" (Jan HY1:15:2706)

LOTTMAN, ROBERT P.

Dsc (Mar HW1:64:2782) of "High Temperature Effects on Bituminous Mixes" (Sept 60 HW3:1:2592)

LOTZ, A. W.

See T. J. Cotter (July PO2:85:2861)

LOVELACE, ELDRIDGE H.

"Coordinating Public Works and Urban Renewal in Kansas City, Kan.," with Ramon Duran (Dec 59 CP2:29:2307)

Dsc: Charles E. Doell (May CP1:41:2487)

Clo: Sept CP1:43:2945

Dsc (May CP1:43:2945) with Ramon Duran of "Coordinating Public Works and Urban Renewal in Kansas City, Kansas" (Sept CP1:43:2945)

LOWE, JOHN, III

Dsc (Oct 60 PO5:26:2631) of "Rockfill Dams: Dams with Sloping Earth Cores" (Aug 58 PO4:1743)

Corr: Jan PO1:77:2723)

LU, LE-WU

Dsc (Aug EM4:149:2916) of "Continuous Beam-Columns on Elastic Foundation" (Apr EM2:55:2801)

Dsc (June EM3:75:2842) of "Elasto-Plastic Analysis by Numerical Procedures" (Dec 60 EM6:73:2690)

See Morris Ojalvo (Aug EM4:35:2884)

LUSS, EDWARD

Dsc (Apr ST4:37:2805) of "Design of Welded Aluminum Structures" (June ST6:101:2528)

LYCAN, DANIEL L.

"Effect of Structure and Foundation Interaction," with Nathan M. Newmark (Oct EM5:1:2960)

MAASLAND, MARINUS

"Water Table Fluctuations Induced by Irrigation" (June IR2:39:2837)

MACAGNO, ENZO OSCAR

"Interfacial Mixing in Stratified Flow," with Hunter Rouse (Oct EM5:55:2964)

MACIAS-RENDÓN, MIGUEL ANGEL

Dsc (Oct ST7:314:2974) of "Moment-Distribution Constants from Cardboard Analogs" (Jan ST1:73:2721)

MACKINTOSH, ALBYN

"Reinforced Masonry Design and Practice, Progress Report—Task Committee on Reinforced Masonry Design and Practice—Committee on Masonry and Reinforced Concrete" (Dec ST8:87:3022)

MACKRLE, SVATOPLUK

See Vladimir Mackrle (Sept SA5:17:2940)

- MACKRLE, VLADIMIR**
"Adhesion in Filters," with Svatopluk Mackrle (Sept SA5:17:2940)
- MacLEAN, BERTON M.**
"Model and Prototype Research on Fish Ladders" (July PO2:57:2856)
Dsc: C. H. Clay (Nov PO3:121:2999)
- MacNEAL, RICHARD H.**
"Arch Dam Analysis with an Electric Analog Computer" (Aug 60 EM4:127:2578)
Dsc: Paul Baumann, Maurice L. Dickinson (Feb EM1:177,179:2751) Raymond A. Hill (June EM3:59:2842)
- MAINARDIS, MARIO**
See Dante Finzi (Jan PO1:49:2723)
- MALAIKA, JAMIL**
Dsc (Nov HY6:249:3000) of "Roughness Spacing in Rigid Open Channels" (May HY3:121:2823)
- MANN, JR. JOHN F.**
"Factors Affecting the Safe Yield of Ground-Water Basins" (Sept IR3:63:2948)
- MANNING, JOHN J.**
"Simple Rules for Hot or Cold Weather Concreting" (Nov 60 CO3:37:2661)
Dsc: Richard J. Newson (Mar CO1:89:2785)
- MANSSELL, DONALD S.**
Dsc (Feb EM1:181:2751) of "Restrained Columns" (Oct 60 EM5:1:2615)
- MANSUR, C. I.**
See W. J. Turnbull (Feb SM1:49:2752)
- MARSH, CEDRIC**
Dsc (June ST5:107:2846) of "Strength and Design of Metal Beam-Columns" (Apr ST4:1:2802)
- MARTIN, IGNACIO**
"General Solution of Space Frameworks," with Jose E. Hernandez (Aug ST6:47:2879)
- MARTIN, ROY S.**
"Design of Fox Point Hurricane Barrier" (Feb WW1:125:2747)
- MARTY, M. H.**
Dsc (May WW2:145:2822) with E. E. Chapus of "Breakwaters in the Hawaiian Islands" (June 60 WW2:39:2507)
- MASCH, FRANK D., JR.**
"Drag Forces in Velocity Gradient Flow," with Walter L. Moore (July 60 HY7:1:2546)
Dsc: W. D. Baines (Jan HY1:271:2724) Donald Van Sickle (Mar HY2:181:2781)
See James A. Harder (Nov WW4:27:2988)
- MASE, GEORGE E.**
"Behavior of Viscoelastic Plates in Bending" (June 60 EM3:25:2498)
Dsc: O. C. Zienkiewicz (Oct 60 EM5:181:2632)
Clo: June EM3:51:2842)
- MASSEY, CAMPBELL**
Dsc (Dec EM6:187:3030) of "Conjugate Beam Simulated by Electric Currents" (Aug EM4:91:2909)
- MASSOCK, THOMAS, JR.**
Dsc (Jan HY1:237:2724) with W. B. Langbein of "Resistance to Flow in Alluvial Channels" (May 60 HY5:73:2485)
- MASUR, E. F.**
"Stability of Frames in the Presence of Primary Bending Moments," with I. C. Chang and L. H. Donnell (Aug EM4:19:2882)
- MATHIS, S. J.**
"Marine Foundation Construction in Oil Fields" (Mar CO1:17:2768)
- MATLOCK, HUDSON**
"Generalized Solutions for Laterally Loaded Piles," with Lymon C. Reese (Oct 60 SM5:63:2626)
Dsc: Aleksandar B. Vesic (June SM3:123:2839)
- MAVIS, F. T.**
Dsc (Feb ST2:64:2754) of "Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)
- MAYER, PAUL G.**
"Roll Waves and Slug Flows in Inclined Open Channels" (July 59 HY7:99:2085)
Dsc: F. F. Escoffier (Dec 59 HY12:125:2271) R. Hugh Taylor and John F. Kennedy (Feb HY2:115:2381) Tojiro Ishihara, Yuichi Iwagaki and Yoshiaki Iwasa (Mar 60 HY3:45:2426)
Clo: Jan HY1:123:2724
- MAYTIN, IURY L.**
"Development of a Variable Resistance Velocity Meter" (Jan HY1:95:2713)
Dsc: M. B. McPherson (July HY4:255:2872)

McCALL, JOHN E.

"Stream-Gaging Network in the United States" (Mar HY2:79:2776)

Dsc: J. C. Stevens (July HY4:259:2872) Eduardo Basso (Nov HY6:217:3000)

McCONOCHIE, WILLIAM R.

"Developing Alternative Urban Transportation Systems" (Mar 60 HW1:47:2417)

Dsc: Kenneth M. Hoover, S. D. Forsythe, Nathan Cherniack (Dec 60 HW4:51,52:2694)

Clo: June HW2:29:2841

McCULLOUGH, BENJAMIN F.

"LTS Design of Continuously Reinforced Concrete Pavements," with William B. Ledbetter (Dec 60 HW4:1:2677)

Dsc: William Zuk, Howard Newlon, Jr., and R. A. Mitchell, Bengt F. Friberg (June HW2:31,33:2841) I. J. Taylor (Sept HW3:33:2919)

McEWAN, JOHN S.

"Bank and Levee Stabilization, Lower Colorado River" (Nov WW4:17:2987)

McFALL, ROBERT L.

Dsc (Mar HY2:196:2781) with Ben A. Jones, Jr. of "Predicting Storm Runoff on Small Experimental Watersheds" (Aug 60 HY8:17:2577)

McGAUHEY, P. H.

"Sanitary Engineering Comes of Age" (May SA3:1:2806)

Dsc: Harold Farnsworth Gray (Nov SA6:149:3003) Kenneth D. Kerri (Nov SA6:150:3003)

McGUINNESS, J. L.

"Hydrogeologic Nature of Streamflow on Small Watersheds," with L. L. Harold and C. R. Amerman (Jan HY1:1:2700)

McKEE, JACK E.

"Pity the Poor Professors?—Or Propagate Them!" (Dec 58 PP1:2870)

Dsc: V. L. Streeter (May 59 PP1:31:2042)

Clo: Jan PP1:31:2722

McKEE, KEITH E.

See Ernest T. Selig (June EM3:55:2842)

See E. T. Selig (Dec SM6:29:3020)

McLAUGHLIN, RONALD T., JR.

"The Settling Properties of Suspensions" (Dec 59 HY12:9:2311)

Dsc: Lucien M. Brush, Jr. and Hau-Wong Ho, E. J. Hall (June HY6:109,111:2535) Charles G. Gunnerson (July HY7:29:2562) N. Claes H. Fischerstroem (Nov HY9:119:2665)

Clo: Sept HY5:203:2920

McNULTY, JAMES F.

"Underpinning of a Wind Tunnel," with James S. O'Brien (Feb SM1:1:2732)

McPHERSON, M. B.

"Generalized Distribution Network Head Loss Characteristics" (Jan 60 HY1:75:2339)

Dsc: E. F. Trunk (May 60 HY5:183:2489) Paul C. Constant, Jr., Marcel Bitoun, Claud C. Lomax, Joseph W. Maier and Thomas C. Miller, J. M. Robertson (July 60 HY7:39,40,43,44,45:2562) G. C. Anderson, J. V. Radziul and P. Celenza (Aug 60 HY8:57:2587) F. P. Linaweaver, Jr., John C. Geyer, Jerome B. Wolff (Nov 60 HY9:127:2665)

Clo: May HY3:183:2827

Dsc (July HY4:255:2872) of "Development of a Variable Reluctance Velocity Meter" (Jan HY1:95:2713)

MCRAE, JOHN L.

Dsc (Mar HW1:66:2782) on "High Temperature Effects on Bituminous Mixes" (Sept 60 HW3:1:2592)

MERKLE, JOHN G.

Dsc (Oct ST7:305:2974) of "Recent Trends in Ultimate Strength Design" (Jan ST1:57:2715)

METCALF, L. R.

See Marvin J. Webster (Jan HY1:133:2724)

METCALFE, A. H.

Dsc (Dec ST8:249:3029) of "Philosophical Aspects of Structural Design" (June ST5:1:2843)

MEYER, ADOLF A.

Dsc (Jan PO1:75:2723) of "Design of Arch Dams by Trial Load Method of Analysis" (Aug 60 PO4:13:2569)

MEYER, L. D.

See E. T. Smerdon (Jan HY1:185:2724)

MEYER, W. L.

See R. C. Rolf (Jan HY1:269:2724)

MEYERHOF, G. G.

"Bearing Capacity of Floating Ice Sheets" (Oct 60 EM5:113:2627)

Dsc: H. G. Hopkins (Feb EM1:185:2751) L. W. Gold, R. H. Wood, N. C. Lind and D. T. Wright (Apr EM2:83,86,87:2803) A. Assur (June EM3:63:2842) G. Y. Sebastyan and F. Penner (Oct EM5:87:2973)

Clo: Dec EM6:161:3030

MEYERSON, LAWRENCE A.

See Finley B. Laverty (Nov SA6:1:2985)

MICHALOS, JAMES

"Design and Stability Considerations for Unique Pier," with David P. Billington (May WW2:1:2907)

Dsc: Palmer W. Roberts (Nov WW4:121:3004)

"Movements of a Cable Due to Changes in Loading," with Charles Birnstiel (Dec 60 ST12:23:2674)

Dsc: Tadeusz Janiszewski (June ST5:89:2846) D. M. Brotton, N. W. Williamson and M. Millar, Hannsharl Bandel, W. E. Adams, and Jackson L. Durkee (Oct ST7:263,267,270,271:2974)

Corr: Mar ST3:67:2787

MICK, KERWIN L.

"Marine Disposal of Wastes: Progress Report, Subcommittee on Specialized Subjects, Committee on Sewerage and Sewage Treatment, Sanitary Engineering Division" (Jan SA1:23:2717)

Corr: May SA3:97:2826

MILANO, JOSEPH

"Cathodic Protection of Marine Terminal Facilities" (May WW2:27:2811)

MILES, JOHN

"Harbor Paradox," with Walter Munk (Aug WW3:111:2888)

MILLAR, M.

See D. M. Brotton (Oct ST7:263:2974)

MILLER, CARL R.

See W. M. Borland (July HY4:239:2872)

MILLER, ROBERT L.

Dsc (Feb WW1:177:2750) of "Breakwaters in the Hawaiian Islands" (June 60 WW2:39:2507)

MILLER, R. P.

See S. D. Wilson (Apr SM2:164:2804)

MINSHALL, NEAL E.

"Predicting Storm Runoff on Small Experimental Watersheds" (Aug 60 HY8:17:2577)

Corr: Jan HY1:283:2724

Dsc: Jaime Amorcho, Merwin D. Dougal; Robert L. McFall and Ben A. Jones, Jr. (Mar HY2:185,193,196:2781) Clo: Nov HY6:203:3000

MITCHELL, JAMES K.

"Fundamental Aspects of Thixotropy in Soils" (June 60 SM3:19:2522)

Dsc: P. L. Newland and B. H. Allely, A. A. Eremin (Dec 60 SM6:99,101:2696) Clo: June SM3:115:2839

"A Review and Evaluation of Soil-Cement Pavements," with Dean R. Freitag (Dec 59 SM6:49:2294)

Dsc: Miles D. Catton, D. J. MacLean and K. E. Clare (June 60 SM3:113,115:2538) Ernest Zube, Earl J. Felt (Aug 60 SM4:73,75:2586)

Clo: Apr SM2:149:2804

MITCHELL, R. A.

See William Zuk (June HW2:31:2851)

MOGG, JOE L.

"Effect of Aquifer Turbulence on Well Drawdown" (Nov 59 HY11:99:2265)

Dsc: J. R. Philip (May 60 HY5:179:2489) E. G. Kruse (June 60 HY6:103:2535)

Clo: Mar HY2:151:2781

MOODY, W. T.

Dsc (Jan HY1:277:2724) of "Unsteady Flow of Ground Water into a Surface Reservoir" (July 60 HY7:13:2551)

MOORE, CHARLIE M.

"Performance of Flood Prevention Works During the 1957 Floods" (Oct 59 HY10:37:2201)

Dsc: Fred W. Blaisdell (Mar 60 HY3:81:2426)

Clo: Jan HY1:149:2724

"Trap Efficiency of Reservoirs, Debris Basins, and Debris Dams," with Walter J. Wood and Graham W. Renfro (Feb 60 HY2:69:2374)

Dsc: Rolland F. Kaser (May 60 HY5:189:2489) Herman G. Heinemann (Aug 60 HY8:71:2587)

Clo: July HY4:235:2872

MOORE, R. WOODWARD

"Geophysics Efficient in Exploring the Subsurface" (June SM3:69:2838)

MOORE, WILLIAM W.

Dsc (Feb PL1:62:2753) with Vernon A. Smoots of "Engineering-Geologist Team Investigates Subsidence" (May 59 PL2: 1:2023)

MORGAN, GEORGE B.

Dsc (Nov SA6:147:3003) of "Radiological Curricula for Sanitary Engineers" (Mar SA2:1:2767)

MORRIS, CARRELL

Dsc (Jan SA1:81:2720) with Werner Stumm and Hend A. Galal of "Man Versus Environment: Twenty-Seventh Progress Report, Committee on Sanitary Engineering Research, Sanitary Engineering Division" (July 60 SA4:13:2549)

MORRIS, HENRY M.

"Design Methods for Flow in Rough Conduits" (July 59 HY7:43:2081)

Dsc: F. V. A. Engel, P. Ackers, Nicholas Bilonok, John A. Roberson (Jan 60 HY1:101,106,109,111:2349)
Clo: Jan HY1:117:2724

MORRIS, SAMUEL B.

"Los Angeles Water Supply and Irrigation" (Dec 60 IR4:35:2671)

Dsc: William H. Donnan, Charles H. Lee (June IR2:63,64:2840) Harry F. Blaney (Sept IR3:77:2949)

"Outlook for Economic Use of Fresh Water from the Sea" (June IR2:15:2834)

MORSE, STANLEY

Dsc (Aug EM4:147:2916) of "Moire Fringes as a Means of Analyzing Strains" (Feb EM1:55:2736)

MOSKOWITZ, KARL

Dsc (Mar HW1:69:2782) with Ichiro Fukutome of "Traffic Behavior and Freeway Ramp Design" (Sept 60 HW3: 41:2604)

MUIR, J. F.

Dsc (May HY3:205:2827) of "Fish Passage Through Hydraulic Turbines" (May HY3:59:2812)

MULLANEY, HOWARD J.

Dsc (Nov WW4:125:3004) of "Economics of River Bank Stabilization" (May WW2:17:2809)

MULLIS, IRA B.

"Roadbeds on Highways and Airport Runways" (Mar 60 HW1:1:2412)

Dsc: Jacob Feld, W. H. Campen, L. G. Erickson, and J. R. Smith (Dec 60 HW4: 39,40:2694)

Clo: June HW2:13:2841

MUNK, WALTER

See John Miles (Aug WW3:111:2888)

MUNSON, WENDELL C.

"Method for Estimating Consumptive Use of Water for Agriculture" (Dec 60 IR4:45:2672)

Dsc: George H. Hargreaves (June IR2:67:2840) Harold D. Hafterson, Harry F. Blaney (Sept IR3:79,80:2949)
Clo: Dec IR4:75:3031

MYERS, V. A.

See C. S. Gilman (May WW2:45:2813)

NAGAI, SHOSHICHIRO

Dsc (Feb WW1:179:2750) of "Tetrapods and Other Precast Blocks for Breakwaters" (Sept 60 WW3:1:2590)

NAMBUDRIPAD, K. D.

See R. J. Garde (Nov HY6:23:2978)

NAUDASCHER, EDUARD

"Vibration of Gates During Overflow and Underflow" (Sept HY5:63:2927)

NELSON, R. WILLIAM

"Design of Interceptor Drains in Heterogeneous Soils" (Dec IR4:41:3011)

Dsc (June 60 IR2:73:2536) of "Laboratory Research on Interceptor Drains" (Sept 59 IR3:25:2154)

Corr: Mar IR1:51:2786

NEMEROW, NELSON L.

"Man Versus Environment: Twenty-Seventh Progress Report, Committee on Sanitary Engineering Research, Sanitary Engineering Division" (July 60 SA4:13: 2549)

Dsc: Carrell Morris, Werner Stumm and Hend A. Galal (Jan SA1:81:2720)

"Solubility of Atmospheric Oxygen in Water: Twenty-Ninth Progress Report, Committee on Sanitary Engineering Research, Sanitary Engineering Division" (June 60 SA4:41:2556)

Dsc: I. C. Hart and A. L. Downing (Mar SA2:59:2783)

Clo: Sept SA5:73:2918

"Survey of Sanitary Landfill Practices: Thirtieth Progress Report," Committee on Sanitary Engineering Research, Sanitary Engineering Division (July SA4:65: 2874)

NEWMARK, NATHAN M.

"Research and Civil Engineering Education" (Oct PP2:1:2950)

See Daniel L. Lycan (Oct EM5:1:2960)

NEWSON, RICHARD J.

Dsc (Aug 60 ST8:111:2585) of "Design of Prestressed Concrete Beams by Computer" (Apr 60 ST4:129:2446)

Corr: Jan ST1:129:2725

Dsc (Mar CO1:89:2785) of "Simple Rules for Hot or Cold Weather Concreting" (Nov 60 CO3:37:2661)

NILSON, ARTHUR H.

"Folded Plate Structures of Light Gage Steel" (Oct ST7:215:2970)

"Shear Diaphragms of Light Gage Steel" (Nov ST11:111:2650)

Dsc: J. Morley English (Oct ST7:247:2974)

NORDIN, C. F., JR.

Dsc (Nov HY6:233:3000) with J. K. Culbertson of "Forms of Roughness in Alluvial Channels" (May HY3:87:2816)

NORTHROP, WILLIAM L.

"Use of Computers for Kansas River Flood Studies," with Clarence W. Timberman (July HY4:113:2866)

OAKES, CECIL K.

"Hydraulic Computation from Limited Information" (Jan HY1:85:2711)

OBERTI, GUIDO

"Italian Arch Dam Design and Model Confirmation" (Mar 60 ST3:1:2410)

Dsc: K. G. Harding and N. S. Trahair (Oct 60 ST10:145:2635)

Clo: June ST5:59:2846

O'BRIEN, JAMES S.

See James F. McNulty (Feb SM1:1:2732)

O'CONNOR, DONALD J.

"Oxygen Balance of an Estuary" (May 60 SA3:35:2472)

Dsc: Robert V. Thomann, M. B. McPherson, C. H. J. Hull (Nov 60 SA6:95,96,105:2666)

Clo: May SA3:67:2826

ODEN, JOHN T.

See Jan J. Tuma (Oct ST7:63:2956)

OJALVO, MORRIS

"Analysis of Frames Loaded into the Plastic Range," with Le-We Lu (Aug EM4:35:2884)

"Restrained Columns" (Oct 60 EM5:1:2615)

Dsc: Donald S. Mansell (Feb EM1:181:2751)

Clo: Aug EM4:137:2916

Dsc (Oct 60 EM5:169:2632) with Ahmet Cakmak of "Behavior of Buckled Rectangular Plates" (Apr 60 EM2:59:2445)

Corr: June EM3:85:2842

Dsc (Dec ST8:266:3029) of "Further Studies of the Strength of Beam-Columns" (Aug ST6:135:2879)

Dsc (Feb ST2:61:2754) of "Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)

OKUN, DANIEL A.

"Sanitary Engineering Education in a Changing World" (July SA4:47:2862)

Dsc: K. J. Ives (Nov SA6:151:3003)

OLKO, STEPHEN M.

Dsc (Dec SM6:87:3032) of "Pile Heave and Redriving" (Aug SM4:125:2905)

OLIVER, A. R.

Dsc (Apr ST4:51:2805) of "Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)

ONDRA, OTAKAR

"Moment-Distribution Constants from Cardboard Analogs" (Jan ST1:73:2721)

Dsc: Paul H. Reimer, Jr., Miguel Angel Macías-Rendón (Oct ST7:313,314:2974)

ORLOB, GERALD T.

"Eddy Diffusion in Homogeneous Turbulence" (Sept 59 HY9:75:2150)

Dsc: Mikio Hino, Takashi Ichiye, Charles G. Gunnerson (Apr 60 HY4:95,97,101:2456)

Clo: Jan HY1:137:2724

OSPINA, CARLOS S.

See Philip Z. Kirpich (Jan HY1:131:2724)

OSTAPENKO, ALEXIS

Dsc (Apr ST4:54:2805) of "Principle of Virtual Work in Structural Analysis" (Nov 60 ST11:65:2643)

OSWALD, WILLIAM J.

"Light Conversion Efficiency of Algae Grown in Sewage" (July 60 SA4:71:2558)

Dsc: Edward R. Hermann (Jan SA1:75:2720) Harold B. Gotaas (Mar SA2:55:2783)

PALMER, ROBERT Q.

"Breakwaters in the Hawaiian Islands" (June 60 WW2:39:2507)

PALMER, ROBERT Q. Continued

Dsc: Robert E. Hickson, J. E. Deignan (Nov 60 WW4:109,115:2659) Charles E. Lee, Robert L. Miller (Feb WW1:175,177:2750) M. H. Marty and E. E. Chapus (May WW2:145:2822)

PARKER, FRANK L.

"Eddy Diffusion in Reservoirs" (May HY3:151:2825)

PARKIN, BLAINE R.

"Impact Waves in Sand: Implications of an Elementary Theory" (Aug SM4:147:2912)

"Impact Waves in Sand: Theory Compared with Experiments on Sand Columns" (June SM3:1:2828)

Dsc: H. G. Hopkins (Dec SM6:69:3032) Robert E. Fulton and A. J. Hendron, Jr. (Dec SM6:69:3032) E. T. Selig and E. Vey (Dec SM6:73:3032)

PARMAKIAN, JOHN

Dsc (Sept HY5:217:2920) of "Vibration Problems in Hydraulic Structures" (Mar HY2:61:2772)

PARSONS, P. J.

"Multiple Soil Sampler" (Dec SM6:19:3012)

PASCHKIS, V.

Dsc (Feb ST2:59:2754) of "Research on Fire Resistance of Prestressed Concrete" (Nov 60 ST11:53:2640)

PEI, MING L.

"Matrix Solution of Beams with Variable Moments of Inertia" (Oct 59 ST8:1:2218)

Dsc: Ray W. Clough, Steven J. Fenves (Jan 60 ST1:129,132:2353) J. Szabo, E. A. Richards (Apr 60 ST4:101,104:2458) Clo: Jan ST1:105:2725

"Vibration of Shear Buildings by Flexibility Method" (Feb EM1:13:2728)

Dsc: Shan S. Kuo (Aug EM4:143:2916)

PENDSE, Y. D.

See Shri M. G. Hiranandani (May WW2:151:2822)

PENNER, F.

See G. Y. Sebstyan (Oct EM5:87:2973)

PENNO, ENNO

Dsc (June EM3:61:2842) of "Dynamic Response of Beams Traversed by Two-Axle Loads" (Oct 60 EM5:91:2624)

PENZIEN, JOSEPH

"Discontinuity Stresses in Beams on Elastic Foundations" (Apr 60 ST4:67:2441)

Dsc: R. S. Alwar (Jan ST1:117:2725) Clo: June ST5:65:2846

"Dynamic Response of Elasto-Plastic Frames" (July 60 ST7:81:2545)

Dsc: A. A. Eremin (Jan ST1:127:2725) John A. Blume (Mar ST3:53:2787)

Clo: Aug ST6:187:2915

PERDIKIS, HARRY S.

"Behavior of Beach Fills in New England" (Feb WW1:75:2744)

Dsc: A. C. Rayner (Aug WW3:155:2914)

PERRI, JOSEPH G.

Dsc (Feb SM1:55:2752) of "Foundation Vibrations" (Aug 60 SM4:1:2564)

PETERKA, A. J.

See G. L. Beichley (Jan HY1:145:2724)

See Glenn L. Beichley (Sept HY5:1:2924)

PETERSON, DEAN F.

"Flume Studies of Flow in Steep Rough Channels," with P. K. Mohanty (Nov 60 HY9:55:2653)

Dsc: F. V. A. Engel, N. Rajaratnam, Herman J. Koloseus (July HY4:245,247,250:2872)

"Intercepting Drainage Wells in Artesian Aquifer" (Mar IR1:7:2761)

Dsc: Mahdi S. Eantush (Dec IR4:79:3031)

Clo: Dec IR4:81:3031

PEYRONNIN, CHESTER A., JR.

"Hydraulics of Southwest Pass, Mississippi River" (Jan HY1:103:2716)

PHILLIPS, ARIS

"The Neutral Axis in Plastic Bending of Beams" (Oct 59 EM4:65:2198)

Dsc: John C. Sprague, H. Norman Abramson (Apr 60 EM2:175:2455)

Clo: Feb EM1:169:2751

PIERCE, JACK W.

"Fundamentals of Cathodic Protection" (Sept PL2:35:2939)

PIKE, WALTER N.

"New Developments in Terminal Air Traffic Control," (with discussion) (Aug AT2:55:2890)

PINNELL, CHARLES

"Traffic Behavior and Freeway Ramp Design," with Charles J. Keese (Sept 60 HW3:41:2604)

PINNELL, CHARLES Continued

Dsc: Karl Moskowitz and Ichiro Fukutome (Mar HW1:69:2782)

PIROK, JOHN N.

See J. Edgar Revelle (Nov PO3:1:2979)

PISTER, KARL S.

"Bending of Plates on a Viscoelastic Foundation," with M. L. Williams (Oct 60 EM5:31:2619)

Corr: June EM3:83:2842

"Viscoelastic Plate on a Viscoelastic Foundation" (Feb EM1:43:2735)

PLETTA, D. H.

"Analysis of Noncoplanar Elastic Rings," with W. C. Liessner and Yen-Ming Yeh (Aug EM4:49:2887)

Dsc (June ST5:95:2846) with J. H. Sword of "Structural Model Analysis by Means of Moire Fringes" (Dec 60 ST12:93:2693)

POLATTY, JAMES M.

"Symposium on Grouting: Investigation of Sand-Cement Grouts" (Apr SM2:83:2795)

Dsc: Judson P. Elston (Aug SM4:205:2917)

POSEY, CHESLEY M.

Dsc (Jan HY1:169:2724) of "Tolkmitt's Backwater and Dropdown Curve Tables" (May 60 HY5:1:2469)

PRESCOTT, WALLACE

See Alfredo H.-S. Ang (Dec EM6:1:3009)

PRIEST, MELVILLE S.

Dsc (Jan HY1:267:2724) of "Models Primarily Dependent on the Reynolds Number" (June 60 HY6:59:2531)

RAIT, ROBERT A.

"Rational Design for Pipelines Across Inundated Areas: Progress Report, Task Committee on Flotation Studies, Pipeline Division" (Feb PL1:31:2755)

RAJARATNAM, N.

Dsc (July HY4:247:2872) of "Flume Studies of Flow in Steep, Rough Channels" (Nov 60 HY9:55:2653)

RAND, WALTER

Dsc (Nov HY6:262:3000) of "Roughness Spacing in Rigid Open Channels" (May HY3:121:2823)

RANDALL, JOHN

Dsc (Feb PL1:70:2753) of "Regulation of Pipeline Design and Construction: Progress Report No. 2, Task Committee on Investigation of Problems Involved in Regulation of Pipeline Design and Construction by Various Governmental Agencies, Committee on Pipeline Planning, Pipeline Division" (Oct 59 PL3:13:2204)

RANGANATHAM, B. V.

Dsc (Oct SM5:123:2972) of "Uncertainties in Earth Dam Design" (June SM3:33:2832)

See William Daniel Finn (Aug SM4:188:2917)

RAO, N. S. GOVINDA

"Prediction of Cavitation Damage," with A. Thiruvengadam (Sept HY5:37:2925)

RAPHAEL, JEROME M.

"Dead-Load Stress in Model Dams by Method of Integration" (Aug ST6:31:2903)

RAWN, A. M.

"Diffusers for Disposal of Sewage in Sea Water," with F. R. Bowerman and Norman H. Brooks (Mar 60 SA2:65:2424)

Dsc: J. M. Jordan, Jr., C. H. Lawrence (Sept 60 SA5:87:2609)
Clo: Mar SA2:51:2783

RAY, GORDON K.

Dsc (Mar AT1:35:2788) with William G. Westall of "Reinforced Concrete Pavements for Airports" (May 60 AT1:1:2460)

RAYNER, A. C.

Dsc (Aug WW3:155:2914) of "Behavior of Beach Fills in New England" (Feb WW1:75:2744)

Dsc (Nov WW4:137:3004) with R. L. Rector of "Groins on the Shores of the Great Lakes" (May WW2:89:2819)

RECHARD, OTTIS W.

See E. Roy Tinney (Sept HY5:135:2935)

RECHTERMANN, F. W.

Dsc (Jan PO1:68:2723) of "Design of Self Supported Steel Transmission Towers" (June 60 PO3:55:2515)

RECTOR, R. L.

See A. C. Rayner (Nov WW4:137:3004)

- REEVES, H. W.
"Marine Oil Terminal for Rio de Janeiro, Brazil" (Feb WW1:47:2733)
Dsc: Glenn B. Woodruff, Richard S. Winkler and Joseph H. Finger (Aug WW3:147,148,152:2914) P. Leimdorfer (Nov WW4:101:3004)
- REILLY, WILLIAM F.
"Nuclear Power for the Arctic," with John T. Rhett, Jr. (Mar CO1:63:2784)
- REIMER, PAUL H., JR.
Dsc (Oct ST7:313:2974) of "Moment-Distribution Constants from Cardboard Analogs" (Jan ST1:73:2721)
- REITMEYER, W. L.
See R. C. Kolf (Mar HY2:19:2763)
- RETTIG, ERIK
Dsc (Nov PO3:119:2999) of "Oroville Dam and Appurtenant Features" (July PO2:29:2852)
- REVELLE, J. EDGAR
"Penstocks and Scroll Cases for Niagara Power Project," with John N. Pirok (Nov PO3:1:2979)
- REYNOLDS, G. C.
Dsc (Aug EM4:141:2916) of "Elasto-Plastic Analysis by Numerical Procedures" (Dec 60 EM6:73:2690)
- RHETT, JOHN T., JR.
See William F. Reilly (Mar CO1:63:2784)
- RHOADES, WELDON E.
See Ralph T. Glasson (Aug AT2:73:2890)
- RHODES, JAMES A.
See William R. Waugh (Jan PO1:47:2723)
- RICHARDSON, EDWARD ADAMS
"The Builder of the Newport (Rhode Island) Tower" (Feb 60 SU1:73:2383)
Clo: Jan SU1:43:2719
- RICHARDSON, E. V.
See D. B. Simons (May HY3:87:2816)
- RICHART, F. E., JR.
"Foundation Vibrations" (Aug 60 SM4:1:2564)
Dsc: D. F. Coates (Dec 60 SM6:103:2696) I. Alpan, Joseph G. Perri, A. A. Eremin (Feb SM1:53,55,60:2752) Bobby Ott Hardin; V. A. Smoots, J. F. Stickel, and J. A. Fisher; S. D. Wilson and R. P. Miller (Apr SM2:157,158,164:2804)
Clo: Aug SM4:169:2917)
- RICHTER, RAYMOND C.
"Artificial Recharge of Ground Water Reservoirs in California," with Robert Y. D. Chun (Dec 59 IR4:1:2281)
Dsc: Max Suter (June 60 IR2:85:2536)
Clo: Sept IR3:73:2949
- RIGGS, H. C.
"Frequency of Natural Events" (Jan HY1:15:2706)
Dsc: Harold G. Lorsch (July HY4:253:2872)
Dsc (July HY4:261:2872) of "Forecasting River Runoff by Coastal Flow Index" (Mar HY2:121:2780)
- RITTER, J. B.
"Blending Natural Earth Deposits for Least Cost," with L. R. Shaffer (Mar CO1:39:2773)
- ROBERSON, JOHN A.
Dsc (Nov HY6:269:3000) of "Roughness Spacing in Rigid Open Channels" (May HY3:121:2823)
- ROBERTS, PALMER W.
Dsc (Nov WW4:121:3004) of "Design and Stability Considerations for Unique Pier" (May WW2:1:2807)
- ROBINSON, A. R.
"Vortex Tube Sand Trap" (Dec IR4:1:2669)
Dsc: Mushtaq Ahmad (Dec IR4:67:3031)
Dsc (Feb ST2:50:2754) of "Method for Analysis of Multibeam Bridges" (July 60 ST7:109:2552)
- ROCKWOOD, DAVID M.
"Forecasting River Runoff by Coastal Flow Index," with Carlton E. Jencks (Mar HY2:121:2780)
Dsc: H. C. Riggs (July HY4:261:2872) Kenneth W. Wise (Sept HY5:225:2920)
- RODGI, SHIVA
See Albert F. Bush (May SA3:39:2824)
- ROGERS, PAUL
See Fritz Kramrösch (Oct SM5:19:2959)
- ROMUALDI, JAMES P.
See John F. Fleming (Oct ST7:31:2955)

RONGVED, PAUL I.

Dsc (Feb EM1:173:2751) of "Underground Structures Subject to Air Overpressure" (Aug 60 EM4:87:2575)

ROUSE, HUNTER

See Enzo Oscar Macagno (Oct EM5: 25:2964)

ROWE, R. ROBINSON

"Highway Pipeline Crossing Practice: Progress Report, Committee on Pipeline Crossing" (Sept HW3:11:2947)
Dsc (May WW2:169:2822) of "Russian River Channel Works" (Nov 60 WW4:17: 2647)

RUBINSTEIN, MOSHE F.

"Effect of Joint Rotation on Dynamics of Structures," with Walter C. Hurty (Dec EM6:135:3028)

RUMER, RALPH R., JR.

See Donald R. F. Harleman (Nov HY6: 257:3000)

RUMMAN, WADI S.

"Stresses in Ring Stiffeners in Cylinders" (Dec ST8:161:3024)

RÜSCH, HUBERT

"Recent Advances in the Design and Behavior of Concrete Bridges" (Oct ST7:199:2969)

SACKMAN, J. L.

"Uniformly Moving Load on a Layered Half Plane" (Aug EM4:75:2907)

SALVADORI, MARIO G.

"Periods of Framed Buildings for Earthquake Analysis," with Ewald Heer (Dec 60 ST12:59:2680)

Dsc: Merit P. White (Mar ST3:63: 2787) Clarence J. Derrick (Apr ST4: 59:2805) A. A. Eremin (June ST5:91: 2846)

Clo: Oct ST7:261:2974

"Spherical Waves in a Plastic Locking Medium," with Richard Skalak and Paul Weidlinger (Feb EM1:1:2727)

"Stresses at a Re-Entrant Corner of a Plate" (Oct ST7:91:2957)

Dsc (Dec ST8:263:3029) of "Bending of Rectangular Plates" (Aug ST6:105: 2879)

See Melvin L. Baron (June EM3:53: 2842)

See P. Gondikas (Aug EM4:139:2916)

SAMI, SABRI

"Continuous Girder Bridge with Variable Moment of Inertia" (Jan 60 ST1: 19:2346)

Corr: May 60 ST5:145:2491

Dsc: Keiichi Hayashi, Narbey Khachatryan (May 60 ST5:145:2491) A. A. Eremin (July 60 ST7:215:2563) Valerian Leontovich (Aug 60 ST8:93:2585)
Clo: Mar ST3:47:2787

SANFORD, CHARLES L.

See David W. Appel (Nov HY6:207: 3000)

SARKARIA, G. S.

Dsc (July PO2:113:2868) of "Design of Arch Dams by Trial-Load Method of Analysis" (Aug 60 PO4:13:2569)

Dsc (July PO2:109:2868) of "Digital Computers for Trial-Load Analysis of Arch Dams" (Aug 60 PO4:1:2568)

SAWYER, CLAIR N.

"Fundamental Considerations in High-Rate Digestion," with Jay S. Grumbling (Mar 60 SA2:49:2411)

Dsc: F. Sulzer, C. E. Keefer (Sept 60 SA5:81,83:2609) M. T. Garrett, Jr. (Nov 60 SA6:89:2666)

Clo: May SA3:63:2826

SAWYER, D. A.

"Various Instability Modes of the Fixed Base Column" (July 60 ST7:61:2544)

Dsc: Marvin A. Larson (Oct 60 ST10: 155:2635) James Chinn (Feb ST2:39: 2754)

Clo: Aug ST6:185:2915

SAWYER, HERBERT A., JR.

"Post-Elastic Behavior of Wide-Flange Steel Beams" (Dec ST8:43:3016)

SAWYER, STEVE R.

Dsc (Feb PL1:69:2753) of "Regulation of Pipeline Design and Construction: Progress Report No. 2, Task Committee on Investigation of Problems Involved in Regulation of Pipeline Design and Construction by Various Governmental Agencies, Committee on Pipeline Planning, Pipeline Division" (Oct 59 PL3: 13:2204)

SAYRE, WILLIAM W.

"Roughness Spacing in Rigid Open Channels," with Maurice L. Albertson (May HY3:121:2823)

Dsc: P. F. Biery and J. W. Delleur (Sept HY5:231:2920) Jamil Malaika (Nov HY6:249:3000) T. Blench (Nov HY6:251: 3000) Donald R. F. Harleman and Ralph R. Rummer, Jr. (Nov HY6:257:3000) Walter Rand (Nov HY6:262:3000) Jacob W. Davidian and Rolland W. Carter (Nov HY6:267:3000) John A. Roberson (Nov HY6:269:3000)

SCHIFF, LEONARD

"Effect of Filtering on Model Recharge Wells" (Dec IR4:55:3015)

SCHIJF, J. B.

Dsc (Nov WW4:127:3004) of "Pneumatic Breakwaters to Protect Dredgers" (May WW2:67:2815)

SCHMERTMANN, JOHN H.

"Cohesion After Non-Hydrostatic Consolidation," with John R. Hall, Jr. (Aug SM4:39:2881)

SCHMIDT, MILTON O.

"Highway and Bridge Surveys: Construction Surveys: Part I Triangulation: Progress Report, Committee on Engineering Surveying, Engineering and Mapping Division (Jan SU1:13:2705)

"Highway and Bridge Surveys: Vertical Control and Special Control Problems in Bridge Construction," Progress Report, Committee on Engineering Surveying, Surveying and Mapping Division (July SU2:9:2853)

SCHROEDER, KENNETH B.

See Joe M. Lara (Apr 59 HY4:79:1997)

See Joe M. Lara (Jan HY1:135:2724)

SCHULZ, W. G.

"Oroville Dam and Appurtenant Features," with D. P. Thayer and J. J. Doody (July PO2:29:2852)

Dsc: Erik Rettig (Nov PO3:119:2999)

SCHUMANN, J. E.

See J. B. Cooke (Jan HY1:27:2707)

SCIAMMERELLA, C. A.

"Moire Fringes as a Means of Analyzing Strains," with A. J. Durelli (Feb EMI:55:2736)

Dsc: Stanley Morse (Aug EM4:147:2917)

Clo: Dec EM6:169:3030

SCORDELIS, A. C.

"Experimental and Analytical Study of a Folded Plate," with E. L. Croy and I. R. Stubbs (Dec ST8:139:3023)

SCOTT, E. O.

"Pipeline Location: As-Built Records: Progress Report, Task Committee on Pipeline Location, Pipeline Division" (Feb PL1:1:2737)

"Pipeline Location: Duties of the Engineer on Construction: Progress Report, Task Committee on Pipeline Location, Pipeline Division" (Feb PL1:17:2739)

"Pipeline Location: Engineering Service Agreement: Progress Report, Task Committee on Pipeline Location, Pipeline Division" (Feb PL1:9:2738)

"Pipeline Location: Location Surveys: Progress Report, Task Committee on Pipeline Location" (Sept PL2:1:2922)

"Pipeline Location: Reconnaissance: Progress Report, Task Committee on Pipeline Location, Pipeline Division" (Feb PL1:21:2740)

SCOTT, RONALD F.

"New Method of Consolidation-Coefficient Evaluation" (Feb SM1:29:2746)

Dsc: K. Y. Lo, M. Arnold (June SM3:127,128:2839) William Daniel Finn, B. V. Ranganatham and I. da Silveira (Aug SM4:187:2917)

SCRIVNER, L. R.

"Digital Computers for Trial-Load Analysis of Arch Dams" (Aug 60 PO4:1:2568)

Dsc: G. S. Sarkaria, R. P. Wengler (July PO2:109,110:286)

Clo: Nov PO3:95:29

SEBASTYAN, G. Y.

Dsc (Oct EM5:113:2726) with F. Penner of "Bearing Capacity of Floating Ice Sheets" (Oct EM5:87:2973)

SEED, H. B.

"Structure and Strength Characteristics of Compacted Clays," with C. K. Chan (Oct 59 SM5:87:2216)

Dsc: I. da Silveira, O. H. Gilbert, Jr., John L. McRae (June 60 SM3:77,81,84:2538) R. E. Olson and J. D. Scott (Aug 60 SM4:65:2586)

Clo: June SM3:107:2839

SELIG, ERNEST T.

"Static and Dynamic Behavior of Small Footings," with K. E. McKee (Dec SM6:29:3020)

"Underground Structures Subject to Air Overpressure," with Keith E. McKee and Eben Vey (Aug 60 EM4:87:2575) Corr: Oct 60 EM5:185

Dsc: Paul I. Rongved; G. S. Kovacs and R. T. Frankian (Feb EM1:173,175:2751)

Clo: June EM3:55:2842

Dsc (Dec SM6:73:3032) with E. Vey of "Impact Waves in Sand: Theory Compared with Experiments on Sand Columns" (June SM3:1:2828)

SEMENZA, CARLO

See Dante Finzi (Jan PO1:49:2723)

SENN, CHARLES L.

"Coliform Organisms as an Index of Water Safety: Progress Report, Committee on Public Health Activities" (Nov SA6:41:2986)

SENOUR, CHARLES

"Economics of River Bank Stabilization" (May WW2:17:2809)

Dsc: Howard J. Mullaney (Nov WW4:125:3004)

SEUFER, P. E.

Dsc (May SA3:95:2826) of "Chlorination of Mixed Sewage and Storm Water" (Jan SA1:1:2701)

SEVIAN, VAHE J.

Dsc (June IR2:73:2840) with Kamil Taj-Eddin of "Irrigation Systems of the Tigris and Euphrates Valleys" (Dec 60 IR4:59:2673)

SHAFFER, L. R.

See J. B. Ritter (Mar CO1:39:2773)

SHELTON, M. J.

"Bibliography on Pipeline Design, Construction, and Operation: Progress Report, Task Committee on Compilation of Bibliography of Reference Materials on Pipeline Design and Construction, Committee on Pipeline Design, Specifications, and Operating Standards, Pipeline Division" (Oct 59 PL3:19:2205)

Dsc: Donald Van Sickle (Feb PL1:73:2753)

"Engineer-Geologist Team Investigates Subsidence," with L. B. James (May 59 PL2:1:2023)

Dsc: Richard E. Burnett; William W. Moore and Vernon A. Smoots (Feb PL1:61:62:2753)

SHEPPARD, JOHN R.

"Total Sediment Transport in the Lower Colorado River" (Nov HY6:139:2990)

SCHINDLER, RICHARD R.

Dsc (Oct SM5:119:2972) of "Symposium on Grouting: Grouting to Prevent Vibration of Machinery" (Apr SM2:43:2793)

SISS, C. P.

See J. G. MacGregor, II:385:3155

SILVESTER, RICHARD

"Engineering Aspects of Coastal Sediment Movement" (Sept 59 WW3:11:2168)

Dsc: R. G. Dean and P. S. Eagleson (June 60 WW2:119:2540)

Clo: Feb WW1:167:2750

SIMMONS, W. P., JR.

"Models Primarily Dependent on the Reynolds Number" (June 60 HY6:59:2531)

Dsc: Melville S. Priest, Milton A. Chapple; R. C. Rolf and W. L. Meyer (Jan HY1:267), 268, 269:2724)

Clo: May HY3:199:2827

SIMONS, DARYL B.

"Forms of Roughness in Alluvial Channels," with E. V. Richardson (May HY3:87:2816)

Dsc: C. F. Nordin, Jr. and J. K. Culbertson (Nov HY6:233:3000) Alan V. Jopling (Nov HY6:238:3000) Vito A. Vanoni and John F. Kennedy (Nov HY6:241:3000)

"Resistance to Flow in Alluvial Channels," with E. V. Richardson (May 60 HY5:73:2485)

Dsc: H. A. Einstein, T. Blench; Emmett M. Laursen and Gerald A. Zernial; Dase E. Hallmark; Thomas Massock, Jr. and W. B. Langbein; R. Hugh Taylor, Jr. and Norman H. Brooks; Lucien M. Brush, Jr. (Jan HY1:219,221,228,234,237,246,256:2724)

"Uniform Water Conveyance Channels in Alluvial Material," with Maurice L. Albertson (May 60 HY5:33:2484)

Dsc: Gerald Lacey, Peter Ackers, G. Kalkanis, John F. Kennedy, T. Blench, Claude Inglis (Jan HY1:187,194,198,203,205,212:2724) Marcel Bitoun, Monir M. Kansoh (Mar HY2:165,171:2781)

Corr: May HY3:207:2827

SKALAK, RICHARD

"Attenuation of Stress Waves in Bilinear Materials," with Paul Weidlinger (June EM3:1:2829)

See Mario G. Salvadori (Feb EM1:1:2727)

SMERDON, E. T.

Dsc (Jan HY1:185:2724) with R. P. Beasley and L. D. Meyer of "Hood Inlet for Closed Conduit Spillways" (May 60 HY5:7:2478)

SMITH, BENJAMIN F.

"Studies for the Lower Monumental Power Plant" (July PO2:1:2874)

SMITH, E. A. L.

"Pile-Driving Analysis by the Wave Equation" (Aug 60 SM4:35:2574)

- SMITH, E. A. L. Continued
Corr: Oct 60 SM5:142
Dsc: L. O. Soderberg, Marvin Gates
(Dec 60 SM6:105,107:2696) E. Jonas, A.
A. Eremin, G. M. Cornfield, Robert D.
Chellis and Arthur F. Zaskey (Feb
SM1:63,64,65,66:2752)
Clo: Oct SM5:111:2972
- SMITH, PHILLIP R.
Dsc (July HY4:243:2872) of "Water
Eddy Forces on Oscillating Cylinders"
(Nov 60 HY9:43:2652)
- SMITH, WILBUR S.
"Analyzing and Projecting Travel
Data" (June 60 HW2:1:2513)
Dsc: Robert L. Morris, James S.
Burch (Dec 60 HW4:55,56:2694) Frank
W. Herring (Mar HW1:57:2782)
- SMOOTS, VERNON A.
Dsc (Apr SM2:158:2804) with J. F.
Stickel and J. A. Fischer of "Foundation
Vibrations" (Aug 60 SM4:1:2564)
See William W. Moore (Feb PL1:62:
2753)
- SNYDER, WILLARD M.
"Continuous Parabolic Interpolation"
(July HY4:99:2865)
Dsc: M. D. Lester (Nov HY6:273:
3000)
"Hydrologic Studies by Electronic
Computers in TVA" (Feb 60 HY2:1:
2362)
Dsc: J. L. Kovner (Aug 60 HY8:37:
2587)
Clo: July HY4:227:2872
- SODD, VINCENT J.
See Conrad P. Straub (Jan SA1:71:
2720)
- SOOKY, A. A.
See J. W. Delleur (Dec EM6:57:3018)
- SORENSEN, ALF H.
See Charles E. Behlke (Aug WW3:144:
2914)
- SPANN, WILLIAM N.
"Status of the State Registration Laws"
(Jan SU1:1:2698)
- SPENGOS, ARIS C.
"Two-Dimensional Flow with Corner
Eddies" (Apr EM2:17:2798)
- SPILLANE, JANET T.
See John S. Wiley (Sept SA5:33:2341)
- STAFFORD, PAUL H.
"Airport Design by Economic Analy-
sis," with Martin A. Warskow (with dis-
cussion), (Aug AT2:29:2890)
- STAVSKY, YEHUDA
"Bending and Stretching of Laminated
Aeolotropic Plates" (Dec EM6:31:3017)
- STEIN, MANUEL
"Behavior of Buckled Rectangular
Plates" (Apr 60 EM2:59:2445)
Dsc: Morris Ojalvo and Ahmet Cak-
mak (Oct 60 EM5:169:2632)
Clo: June EM3:49:2842
- STEINBERG, ISRAEL H.
"Russian River Channel Works" (Nov
60 WW4:17:2647)
Dsc: R. Robinson Rowe, Otto C. Von
Seggern (May WW2:169,170:2822)
Corr: May WW2:189:2822
Clo: Nov WW4:89:3004
- STETSON, EDWARD D.
See William L. Barry (Mar IR1:47:
2786)
- STETSON, JOHN B.
See D. R. Forrest (Nov WW4:69:2994)
- STEVEN, JAMES R.
Dsc (Sept HY5:222:2920) of "Vector
Aspects of Dynamic Similarity" (Mar
HY2:19:2763)
- STEVENS, J. C.
Dsc (July HY4:259:2872) of "Stream-
Gaging Network in the United States"
(Mar HY2:79:2776)
- STICKEL, J. F.
See V. A. Smoots (Apr SM2:158:2804)
- STOKES, RALPH C.
See James R. Ayers (Aug WW3:95:
2886)
- STONE, RALPH
See Finley B. Lavery (Nov SA6:1:
2985)
- STRAUB, CONRAD P.
Dsc (Jan SA1:71:2720) with Vincent J.
Sodd of "Waste Treatment at the Ship-
ping Port Reactor" (May 60 SA3:129:
2481)
- STUART, W. HAROLD
"Influence of Geological Conditions on
Uplift" (Dec SM6:1:3008)

STUBBS, I. R.

See A. C. Scordelis (Dec ST8:139:3023)

STUMM, WERNER

"Investigation on the Corrosive Behavior of Waters" (Nov 60 SA6:27:2657)
Dsc: James Girand (May SA3:77:2826)

Clo: Nov SA6:143:3003

See Carrell Morris (Jan SA1:81:2720)

SU, HSUAN LOH

"Philosophical Aspects of Structural Design" (June ST5:1:2843)

Dsc: A. H. Metcalfe (Dec ST8:249:3029)

Dsc (Apr ST4:49:2905) on "Flow Graphs in Structural Analysis" (Oct ST10:125:2634)

SUBRAMANYA, K.

See R. J. Garde (Nov HY6:23:2978)

SUJATA, H. L.

Dsc (June EM3:67:2842) with Hans Conrad of "Physical Metallurgy and Mechanical Properties of Materials: Brittle Fracture" (Dec 60 EM6:29:2686)

SUTHERLAND, REGINALD J.

"Summary of Symposium on Supersonic Air Transport" (with discussion), (Aug AT2:89:2890)

SWAB, BERNAL H.

"Effects of Hydrogen Sulfide on Concrete Structures" (Sept SA5:1:2921)

SWIFT, A. M.

See R. H. Karol (Apr SM2:125:2797)

SWIGER, W. F.

"Symposium on Grouting: Construction of Rocky Reach Grouted Cutoff" (Apr SM2:95:2796)

Dsc: Judson P. Elston (Dec SM6:61:3032) E. S. Bell (Dec SM6:62:3032) John E. Wagner (Dec SM6:62:3032)

SWORD, J. H.

See D. H. Pletta (June ST5:95:2846)

SYMONS, JAMES M.

"Metabolism of Organic Sulfonates by Activated Sludge," with Luis A. del Valle-Rivera (Sept SA5:53:2942)

TAJ-EDDIN, KAMIL

See Vahe J. Seviaan (June IR2:73:2840)

TAYLOR, R. HUGH, JR.

Dsc (Jan HY1:246:2724) with Norman H. Brooks of "Resistance to Flow in Alluvial Channels" (May 60 HY5:73:2485)

TEDESKO, ANTON

"Multiple Ribless Shells" (Oct ST7:107:2962)

THAYER, W. G.

See W. G. Shulz (July PO2:29:2852)

THEROUX, R. J.

"Removal of Floatables from Digested Sludge," with C. H. Lawrance and N. B. Hume (Mar SA2:21:2778)

THIRUVENGADAM, A.

See N. S. Govinda Rao (Sept HY5:37:2925)

THOM, H. C. S.

"Distributions of Extreme Winds in the United States" (Apr 60 ST4:11:2433)

Dsc: J. Lieblein (Nov 60 ST11:161:2667)

Clo: Apr ST4:35:2805

THOMAS, CHARLES W.

"World Practices in Water Measurement at Turnouts" (June 60 IR2:29:2530)

Dsc: Lee Chow (Dec 60 IR4:135:2695)

Clo: June IR2:61:2840

THOMAS, ROBERT L.

"Experimental Study of Beams on Elastic Foundations" (June 60 EM3:107:2505)

Dsc: L. F. Stephens (Dec 60 EM6:109:2691) M. T. Davison (Feb EM1:171:2751)

THURLIMANN, BRUNO

See Konrad Basler (Aug ST6:153:2879)

TIMBERMAN, CLARENCE W.

See William L. Northrop (July HY4:113:2866)

TINNEY, E. ROY

"Free Streamline Theory for Segmental Jet Deflectors," with Wilfred E. Barnes, Otis W. Rechard and Glenn R. Ingram (Sept HY5:135:2935)

"Mechanics of Washout of an Erodible Fuse Plug," with H. Y. Hsu (May HY3:1:2808)

"Terminal Shape of a Shallow Liquid Front," with D. L. Bassett (Sept HY5:117:2934)

TODD, DAVID K.

"Seepage Through Layered Anisotropic Porous Media," with Jacob Bear (May HY3:31:2810)

TOEBES, GERRIT H.

Dsc (Apr EM2:75:2803) of "Wind Stresses in Domes" (Oct 60 EM5:13:2616)

TOFFALETI, FRED B.

"Sedimentation Aspects in Diversion at Old River" (June 60 HY6:37:2525)
Dsc: Russell Woodburn, T. Blench (Jan HY1:259:2724)

TOLLEFSON, ROGER

"Fisheries Statistics in Evaluating Claims of Pollution" (May SA3:11:2818)

TONG, ANNABEL L.

"Elasto-Plastic Analysis by Numerical Procedures" (Dec 60 EM6:73:2690)
Dsc: Daniel Frederick (Apr EM2:89:2803) Le-Wu Lu (June EM3:75:2842) G. C. Reynolds (Aug EM4:141:2916)
Clo: Oct EM5:97:2973

TOWNSEND, F. WAYNE

"A Comparison of Stream Velocity Meters," with F. A. Blust (Apr 60 HY4:11:2438)
Dsc: Harold G. Golden and I. L. Trotter, Jr. (Nov 60 HY9:155:2665)
Clo: July HY4:237:2872

TROLLOPE, D. HUGH

"Soil Structure and the Step-Strain Phenomenon," with C. K. Chan (Apr 60 SM2:1:2431)
Dsc: D. F. Coates (Aug 60 SM4:99:2586) B. K. Hough, A. A. Eremin (Oct 60 SM5:133,136:2636) John L. McRae (Dec 60 SM6:93:2696)
Clo: June SM3:111:2839
Dsc (Nov PO3:107:2999) with Ian K. Lee of "Stress Analysis and Special Problems of Prestressed Dams" (Jan PO1:7:2714)

TROY, RICHARD G.

Dsc (Oct EM5:99:2973) of "Response of Multi-Story Structures to Earthquake" (Apr EM2:1:2790)

TRUDEAU, ARTHUR G.

"Research for Survival" (Oct PP2:15:2951)

TUEMMLER, FRED W.

"Land Use and Expressways" (Sept CP1:29:2938)

TUMA, JAN J.

"Analysis of Continuous Trusses by Carry-Over Moments" (Dec 59 ST10:27:2314)
Corr: Apr 60 ST4:121:2458
Dsc: Valeriu Petcu (May 60 ST5:135:2491)
Clo: Mar ST3:41:2787
"String Polygon Analysis of Frames with Straight Members," with John T. Oden (Oct ST7:63:2956)

TURNBULL, W. J.

"Design of Underseepage Control Measures for Dams and Levees," with C. I. Mansur (Oct 59 SM5:129:2217)
Dsc: Marcel Bitoun and Jorgen Christiansen (Feb 60 SM1:99:2391) H. R. Cederger, Max Suter (Apr 60 SM2:121, 124:2459) Karl H. Evans (June 60 SM3:91:2538)
Clo: Feb SM1:49:2752
Dsc (Feb SM1:77:2752) of "Seepage Requirements of Filters and Pervious Bases" (Oct 60 SM5:15:2623)

TUTTLE, JAMES M.

"Surveys for the Lake Pontchartrain Bridge" (Jan SU1:1:2702)
Dsc: Shu-t'ien Li (July SU2:69:2870)

UPPAL, H. L.

Dsc (Nov HY6:212:3000) of "Vibration Problems in Hydraulic Structures" (Mar HY2:61:2772)

VANONI, VITO A.

Dsc (Nov HY6:241:3000) with John F. Kennedy of "Forms of Roughness in Alluvial Channels" (May HY6:241:3000)
Dsc (Sept HY5:216:2920) of "Needs in Sedimentation" (Mar HY2:1:2756)

VAN SICKLE, DONALD

Dsc (Feb PL1:73:2753) of "Bibliography on Pipeline Design, Construction, and Operation: Progress Report, Task Committee on Compilation of Bibliography of Reference Materials on Pipeline Design, Specifications, and Operating Standards, Pipeline Division" (Oct 59 PL3:19:2205)
Dsc (Mar HY2:181:2781) of "Drag Forces in Velocity Gradient Flow" (July 60 HY7:1:2546)
Dsc (May HY3:201:2827) of "Water Eddy Forces on Oscillating Cylinders" (Nov 60 HY9:43:2652)

VAN TIENHOVEN, JAN C.

"Translations of Foreign Literature on Hydraulics: Third Progress Report,

VAN TIENHOVEN, JAN C. Continued

"Task Force on List of Translations, Committee on Hydromechanics, Hydraulics Division" (Nov 60 HY9:99:2656)

Corr: Jan HY1:283:2724

VELTROP, J. A.

Dsc (July PO2:116:2868) of "Design of Arch Dams by Trial-Load Method of Analysis" (Aug 60 PO4:13:2569)

VESIC, ALEKSANDAR B.

"Bending of Beams Resting on Isotropic Elastic Solid" (Apr EM2:35:2800)

Dsc (June SM3:123:2839) of "Generalized Solutions for Laterally Loaded Piles" (Oct 60 SM5:63:2626)

VEY, EBEN

See Ernest T. Selig (June EM3:55:2842)

See E. T. Selig (Dec SM6:73:3032)

VIEST, IVAN M.

"Review of Research on Composite Steel-Concrete Beams" (June 60 ST6:1:2496)

Dsc: W. J. Jurkovich (Sept 60 ST9:33:2612) J. C. Chapman (Dec 60 ST12:127:2697)

Clo: June ST5:77:2846

"Tentative Recommendations for the Design and Construction of Composite Beams and Girders for Buildings: Progress Report, Joint ASCE-ACI Committee on Composite Construction, Structural Division" (Dec 60 ST12:73:2692)

Dsc: M. W. Kaufman (Feb ST2:67:2754) Sven H. Wichman (June ST5:93:2846)

See John W. Fisher (Feb ST2:53:2754)

VOGEL, HERBERT D.

"New Approach to Local Flood Problems" (Jan 60 HY1:53:2336)

Dsc: Bernard L. Golding (Apr 60 HY4:133:2456)

Clo: Mar HY2:153:2781

VOLTERRA, ENRICO

"Method of Internal Constraints and Its Application" (Aug EM4:103:2911)

VON GUNTEN, GLENN H.

"Fish Passage Through Hydraulic Turbines" (May HY3:59:2812)

Dsc: J. F. Muir (May HY3:205:2827)

See Parker R. Grimes (Jan PO1:1:2709)

VON SEGGERN, OTTO C.

Dsc (May WW2:170:2822) of "Russian River Channel Works" (Nov 60 WW4:17:2647)

WAGNER, JOHN E.

Dsc (Dec SM6:62:3032) of "Symposium on Grouting: Construction on Rocky Reach Grouting Cutoff" (Apr SM2:95:2796)

Dsc (Dec SM6:55:3032) of "Symposium on Grouting: Grouting of Granular Materials" (Apr SM2:1:2791)

WALLACE, WILLIAM L.

"Displacement of Long Footings by Dynamic Loads" (Oct SM5:45:2965)

WANG, T. M.

See S. L. Lee (Apr EM2:55:2801)

WARSKOW, MARTIN A.

See Paul H. Stafford (Aug AT2:29:2890)

WASLEY, RICHARD J.

"Hydrodynamics of Flow into Curb-Opening Inlets" (Aug EM4:1:2880)

Dsc: James A. Liggett (Dec EM6:185:3030)

"Uniform Flow in a Shallow, Triangular Open Channel" (Sept HY5:149:2936)

WÄSTLUND, GEORG

"Stability Problems of Compressed Steel Members and Arch Bridges" (June 60 ST6:47:2512)

Dsc: S. O. Asplund (Jan ST1:125:2512)

WAUGH, WILLIAM R.

"Control of Cracking in Concrete Gravity Dams," with James A. Rhodes (Oct 59 PO5:1:2206)

Dsc: Bryant Mather (Apr 60 PO2:57:2457)

Clo: Jan PO1:47:2723

WAYNE, WARNER W., JR.

"Fish Handling Facilities for Baker River Project" (Nov PO3:23:2993)

WEAVER, WILLIAM, JR.

"Wind-Induced Vibrations in Antenna Members" (Feb EM1:141:2748)

Dsc: Glenn B. Woodruff (June EM3:81:2842)

Clo: Dec EM6:171:3030

WEBSTER, MARVIN J.

"Friction Factors in Corrugated Metal Pipe," with Laurence P. Metcalf (Sept 59 HY9:69:2148)

WEBSTER, MARVIN J. Continued

- Dsc: M. H. Diskin (Feb HY2:125:2381) A. R. Chamberlain, Nicholas Bilonok (Mar 60 HY3:67,72:2426) W. O. Ree (Apr 60 HY4:91:2456)
 Clo: Jan HY1:133:2724
 "Spillway Design for Pacific Northwest Projects" (Aug 59 HY8:63:2129)
 Dsc: B. Michel and A. R. Gagnon (Mar 60 HY3:61:2426)
 Clo: Jan HY1:129:2724

WEIDLINGER, PAUL

- See Mario G. Salvadori (Feb EM1:1:2727)
 See Melvin L. Baron (Feb EM1:23:2731)
 See Richard Skalak (June EM3:1:2829)

WEIDNER, C. KEN

- "Sputniks, Flopniks, and Engineering Education" (Dec 58 PP1:1872)
 Dsc: F. C. Lindvall, L. E. Grinter (May 59 PP1:35:2042)
 Clo: Jan PP1:37:2722

WELLS, JOHN H.

- Dsc (Oct ST7:286:2974) of "Static and Dynamic Analysis of Guy Cables" (Jan ST1:1:2703)

WEN, ROBERT K.

- "Dynamic Response of Beams Traversed by Two-Axle Loads" (Oct 60 EM5:91:2624)
 Dsc: Enno Penno (June EM3:61:2842)
 Clo: Oct EM5:85:2973
 Corr: June EM3:84:2842

WENGLER, R. P.

- Dsc (July PO2:110:2868) of "Digital Computers for Trial-Load Analysis of Arch Dams" (Aug 60 PO4:1:2568)

WESTALL, WILLIAM G.

- See Gordon K. Ray (Mar AT1:35:2788)

WHETSTONE, GEORGE A.

- Dsc (Nov PO3:115:2999) of "Power from the Sea" (July PO2:21:2850)

WHITE, ARDIS

- "Analysis of Rigid Frames by Electronic Computation" (Nov 59 ST9:65:2259)
 Dsc: Elwyn H. King (June ST6:139:2539)
 Clo: Jan ST1:113:2725
 "Field Study of a Cellular Bulkhead," with James A. Cheney and C. Martin Duke (Aug SM4:89:2902)

WHITE, CLARK L.

- Dsc (Jan PO1:65:2723) of "Design of Self Supported Steel Transmission Towers" (June 60 PO3:55:2515)

WHITE, MERIT P.

- Dsc (Mar ST3:63:2787) of "Periods of Framed Buildings for Earthquake Analysis" (Dec 60 ST12:59:2680)

WHITE, ROBERT E.

- Dsc (Nov PO3:110:2999) of "Stress Analysis and Special Problems of Prestressed Dams" (Jan PO1:7:2714)
 Dsc (Dec SM6:57:3032) of "Symposium on Grouting: Research in Foundation Grouting with Cement" (Apr SM2:55:2794)

WHITNEY, EDWARD N.

- Dsc (Sept HY5:199:2920) of "Two Methods to Compute Water Surface Profiles" (Apr 59 HY4:79:1997)

WICHMAN, SVEN H.

- Dsc (June ST5:93:2846) of "Tentative Recommendations for the Design and Construction of Composite Beams and Girders for Buildings: Progress Report, Joint ASCE-ACI Committee on Composite Construction, Structural Division" (Dec 60 ST12:73:2692)

WIESINGER, F. P.

- See S. L. Lee (Jan ST1:115:2725)

WIGAND, ROBERT C.

- "Surveys for Spacecraft Tracking Sites" (July SU2:1:2848)

WILEY, JOHN S.

- "Refuse-Sludge Compositing in Windows and Bins," with Janet T. Spillane (Sept SA5:33:2941)

WILKAS, BERT C.

- "Six Thousand High School Students View Engineering and Scientific Careers: Report of the Student Activities Committee, San Diego Section" (Dec 58 PP1:1868)
 Clo: Jan SU1:31:2722

WILLARDSON, LYMAN S.

- Dsc (Sept IR3:91:2949) of "Relation of Intake Rate to Length of Run in Surface Irrigation" (Mar IR1:23:2769)

WILLIAMS, GORDON R.

- "Cyclical Variations in World-Wide Hydrologic Data" (Nov HY6:71:2982)

WILLIAMS, ROGER H.

- "Ventilated Building Foundations in Greenland" (Sept 59 CO2:23:2142)
Dsc: John A. Pihlainen (May 60 CO2:43:2488)
Clo: Mar CO1:87:2785

WILLIAMSON, N. W.

- See D. M. Brotton (Oct ST7:263:2974)

WILSON, BASIL W.

- "Deep Water Wave Generations by Moving Wind Systems" (May WW2:113:2821)
"Foundation Stability for a Submarine Liquid Sulphur Pipeline" (Aug SM4:1:2878)

WILSON, S. D.

- Dsc (Apr SM2:164:2804) with R. P. Miller of "Foundation Vibrations" (Aug 60 SM4:1:2564)

WINKLER, RICHARD S.

- See Glenn B. Woodruff (Aug WW3:148:2914)

WINTER, GEORGE

- "Properties of Steel and Concrete and the Behavior of Structures" (Feb 60 ST2:33:2384)

- Dsc: Ralph L. Barnett (June ST6:161:2539) Lester H. Gabriel (July 60 ST7:219:2563) Henry J. Cowan, Oliver G. Julian (Aug 60 ST8:97:2585) A. Zaslavsky, Paul Zia (Dec 60 ST12:117,118:2697)

- Clo: June ST5:51:2846

WISE, KENNETH W.

- Dsc (Sept HY5:225:2920) of "Forecasting River Runoff by Coastal Flow Index" (Mar HY2:121:2780)

WOLF, WILLIAM H.

- "Current Developments in Hydro-Electric Plant Design" (Nov PO3:55:2995)

WOOD, R. H.

- Dsc (Apr WM2:86:2803) of "Bearing Capacity of Floating Ice Sheets" (Oct 60 EM5:113:2627)

WOODBURN, RUSSELL

- Dsc (Jan HY1:259:2724) of "Sedimentation Aspects in Diversion at Old River" (June 60 HY6:37:2525)

WOODRUFF, GLENN B.

- Dsc: (Aug WW3:147:2914) with Richard S. Winkler and Joseph H. Finger of

- "Marine Oil Terminal for Rio de Janeiro, Brazil" (Feb WW1:47:2733)

- Dsc (June EM3:81:2842) of "Wind Induced Vibrations in Antenna Members" (Feb EM1:141:2748)

WOODRUFF, RICHARD S.

- "Private Power Development of an Entire River" (July PO2:69:2857)

WOODS, HUBERT

- "Research on Fire Resistance of Prestressed Concrete" (Nov 60 ST11:53:2640)

- Dsc: V. Paschkis (Feb ST2:53:2754)
Clo: June ST5:81:2846

WOODSON, ROBERT C.

- "Stabilization of the Middle Rio Grande in New Mexico" (Nov WW4:1:2980)

WOODWARD, E. J., JR.

- Dsc (Mar HW1:61:2782) of "High Temperature Effects on Bituminous Mixes" (Sept 60 HW3:1:2592)

WOOLF, ABRAHAM

- Dsc (Dec ST8:254:3029) of "Steel Frame Folded Roof" (June ST5:35:2845)

WYATT, THOMAS ALAN

- "Secondary Stresses in Parallel Wire Suspension Cables" (July 60 ST7:37:2542)

- Dsc: T. Janiszewski and Blair Bird-sall (Mar ST3:49:2787)
Clo: Oct ST7:241:2974

YEAGER, PAUL

- See Robert J. Hansen (Mar HW1:21:2789)

YEH, YEN-MING

- See D. H. Pletta (Aug EM4:49:2887)

YEVDJEVICH, V. M.

- "Underground Power Plants in Yugoslavia" (Nov PO3:81:2998)

YOUNG, DONALD F.

- "Drag and Lift on Spheres Within Cylindrical Tubes" (June 60 HY6:47:2526)
Dsc: Emmett M. Laursen, Egidio Irdi (Jan HY1:263,265:2724)

- Clo: May HY3:197:2827

- "Electric Analog Computers for Laminar Flow Problems" (Dec EM6:17:3013)

ZASKEY, ARTHUR F.

- See Robert D. Chellis (Feb SM1:66:2752)

ZASLAVSKY, DAN

Dsc (Nov WW4:119:3004) of "Variable Head Technique for Seepage Meters" (Mar IR1:23:2775)

ZERNIAL, GERALD A.

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ZIELINSKI, P. B.

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ZIENKIEWICZ, O. C.

"Comparative Study of a Segmental Arch Ring" (Jan 60 EM1:19:2332)
Dsc: J. A. Veltrop (Aug 60 EM4:185:2583)

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"Stress Analysis and Special Problems of Prestressed Dams," with R. W. Gerstner (Jan PO1:7:2714)

Dsc: Charles Jaeger (July PP2:123:2868) D. Hugh Trollope and Ian K. Lee (Nov PO3:107:2999) Robert E. White (Nov PO3:110:2999)

ZONARS, APOSTOLOS H.

"Aircraft Runway Arresting Barriers" (Aug AT2:121:2897)

ZSUTTY, THEODORE C.

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ZUK, WILLIAM

Dsc (June HW2:31:2841) with Howard Newlon, Jr. and R. A. Mitchell of "LTS Design of Continuously Reinforced Concrete Pavement" (Dec 60 HW4:1:2677)